

No. 15412-15413

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United States  
Court of Appeals  
for the Ninth Circuit

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UNDERWRITERS AT LLOYD'S LONDON,  
ENGLAND, Appellant,

vs.

JANE S. LYONS, Appellee.

GLENS FALLS INDEMNITY CO., a Corpora-  
tion, Appellant,

vs.

JANE S. LYONS, Appellee.

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Transcript of Record  
(In Three Volumes)

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Volume II  
(Pages 39 to 464)

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Appeal from the United States District Court for the  
District of Oregon



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Appeal from the United States District Court for the  
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In the United States District Court  
for the District of Oregon

Civil No. 7256

JANE S. LYONS,

Plaintiff,

vs.

UNDERWRITERS AT LLOYD'S LONDON,  
ENGLAND,

Defendant.

Civil No. 7381

JANE S. LYONS,

Plaintiff,

vs.

GLENS FALLS INDEMNITY CO., a New York  
Corporation,

Defendant.

Before: Honorable Edward P. Murphy, Judge.

Appearances:

For Plaintiff:

MR. ROBERT F. MAGUIRE,  
MR. HOWARD K. BEEBE.

For Defendant:

MR. RICHARD E. KRIESIEN,  
MR. RAYMOND MIZE.

## Proceedings

The Court: Jane S. Lyons vs. Underwriters at Lloyd's in London and Glens Falls Indemnity Co. Those two cases have been consolidated. I am ready to proceed.

Mr. Beebe: Plaintiffs are ready, your Honor.

Mr. Kriesien: Defendants are ready, your Honor.

Mr. Beebe: May the Court please, this is an action referring to the case of Jane S. Lyons vs. Underwriters at Lloyd's London upon two identical policies of accident insurance. One in the sum of \$75,000. The other in the sum of \$25,000. Consolidated in the case is a policy of straight accident insurance by the Glens Falls Indemnity Company in the amount of \$5,000. The policies issued by Underwriters at Lloyd's of London insured against death caused by bodily injury which resulted solely from external violent accident and visible means. The policy did not—that is to say, there was an exclusionary clause which excluded the indemnity if the death resulted or was caused or contributed to by disease or natural causes. The wording of the Glens Falls policy required that the death be caused wholly and independently of all other causes by external violence and accident, and there was an exclusionary provision which excluded death which was caused or contributed to by bodily infirmity or disease.

The insured under the policy was Mr. James Lyons, who was in the lumber business in Oregon

in Coos Bay, and he was a very successful man, a very active, dynamic and busy man, forty-nine years of age. He had just immediately prior to his death been on a very extensive business trip where he had a great deal [2\*] of business responsibility, which had involved a considerable amount of traveling. When he returned from that trip to Palm Springs, where he maintained a home, as the evidence I hope will show, I believe that one of his children suffered from an allergic asthma and was required to live in a desert climate most of the time in the wintertime, and that he maintained a home in Palm Springs for his family. And that his doctor in Palm Springs, the family doctor, was Dr. William McBride, who was and is a specialist in internal medicine and who had treated Mr. Lyons, I again believe the evidence will show, and had given him repeated physical examinations once a year after 1950, and he went to Dr. McBride where he complained of pain in his chest, and I believe in the arm. Dr. McBride conducted a thorough cardiac examination including exercise tolerance tests and electrocardiograms, which proved to be within normal limits and he did blood tests on him and concluded that all the examination revealed no objective symptoms or signs of heart disease. The insured was contemplating a fishing trip with his partner, Mr. Howard Irwin and with Dr. Francis Chamberlain, a heart specialist of San Francisco. Let me say, Mr. Irwin was a friend of the doctor,

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\*Page numbering appearing at top of page of original Reporter's Transcript of Record.

and Dr. Homer Rush, a heart specialist of Portland.

He asked Dr. McBride whether he should go on this trip and Dr. McBride assured him that all his tests were perfectly normal and in his opinion, he was suffering from cardiac fatigue mainly, and emotional stress and fatigue from his work. [3]

Now, the evidence will show that the cardiac fatigue idea has been carried forward and is used generally to describe a pain in the chest and is based on exhaustion and nervous stress and does not necessarily involve the heart itself.

The party proceeded to the lower portion of Lower California peninsula in Mexico and there Mr. Lyons was observed by Dr. Chamberlain and Dr. Rush for a period of some three or four days I believe, and during that time he was subject to considerable physical exertion upon occasions as well as the ordinary things of life, eating, sleeping, resting and so forth. Indeed, upon one occasion, the day before his death, they were doing some deep-sea fishing and Mr. Lyons hooked a large marlin, and fortunately, we have for offer in evidence, motion pictures taken of this large marlin which he hooked and while it was leaping high out of the water, and the evidence will be that during that time he underwent a period of sustained exertion for a period of some twenty or thirty minutes without any evidence of shortness of breath or of other cardiac or heart symptoms. That following morning, together with a party of Mexicans, a Senor Ruiz, who was the port captain and had become ac-

quainted with the party, suggested they go shooting doves and on that morning, Mr. Lyons appeared to be in very good health. In fact, he commented upon how good he felt and how good it was to be alive on a morning like that, and they took an automobile and went up the shore to a point where Senor Ruiz had told them that the [4] doves flew over in great quantities. They had obtained some weapons. Mr. Lyons had a twelve-gauge magnum shotgun from the ship and Dr. Rush had a .22 rifle, and during some hour or so at least before the fatal occurrence, Dr. Rush and Mr. Lyons walked briskly up a hill and Dr. Rush specifically noted at the time that he himself was out of breath but that Mr. Lyons was displaying no symptoms of shortness of breath or any pain in the chest or anything of that nature.

They went on down to the place where they were to hunt doves. Dr. Chamberlain had a motion picture camera and he didn't have a gun, so when these promised doves didn't come, he went back down to the village.

Mr. Lyons was stationed at one spot where the doves flew over and in the terrain it was sandy and there were small desertlike bushes, mesquite bushes and Dr. Rush, a distance away where he could not see Mr. Lyons, but approximately sixty to a hundred yards, something of that nature. Soon after the doves did start to come over and Dr. Rush heard a shotgun explode several times and saw several doves fall to the ground and then he heard one shot and saw a dove fall. Shortly after that, just a few seconds, heard another blast of the shot-



gun. He was there with his own .22 rifle and had had no shots. He mentally thought, "Why is Jimmy killing all those doves? Why doesn't he let a few others come over so I can get a shot." So, some fifteen or twenty seconds went by and Dr. Rush heard a wheezing sound, which [5] he described as being like the snorting or breathing that would be made by an enraged animal, a very loud type of thing. They went to investigate, to find what it was and he found Mr. Lyons lying face downward with the extreme end of the barrel protruding from under his left shoulder and diagonally across. There was blood and powder burns on his face and he was, as I say, going through this stertorous breathing, this heavy breathing. Dr. Rush had, of course, no medical equipment there, so the first thought he had was to give artificial respiration, which he did. He felt the heart. He listened, of course, but he felt the heart and he felt not a beat, but a purring. He described it as though if a person had put his hand upon a cat that was sleeping, a purring sensation, and the insured was pulseless and cyanotic and died some five minutes or so afterward. That is to say, the breathing stopped. There was a frothy edema or liquid coming from his mouth. Dr. Chamberlain returned and took some pictures of the surrounding territory. However, at that time, Dr. Rush had turned the insured over and he was not in the same position, and Dr. Chamberlain took some pictures of the body and of the surrounding terrain showing the mesquite brush,

which we will offer in evidence later on. Thereafter, the Mexican officials took over. The party was advised under Mexican law the body has to stay right there, and they tried to protect it from the elements of the sun and insects and so forth, and put a tarp over it, and the legal machinery in Mexico went into operation. [6] Finally late in the evening, some time afterwards, an autopsy was performed by two Mexican doctors. In that connection, we have been attempting to and we have had some difficulty in getting a precise translation of the autopsy report, because of the available interpreters and the translators here did not seem to be able to cope with the exact meaning of the words in Mexican medicine and it was only last night that we were finally able to contact a Mexican who is a resident, who gave the best translation of the autopsy, so far as the significant meanings of the autopsy. The evidence will show your Honor that there was found upon dissection of the coronary arteries, atheromatous deposits, and I might say, that that is a form of arteriosclerosis.

Mr. Kriesien of counsel for the defendant went to Mexico and interrogated Dr. Serrano, one of the Mexican doctors who performed the autopsy. We were not present, but he did interrogate him, and he prepared the page and the translation which will be offered, and those are all the facts which both parties have been able to develop on this matter.

But, to return to the autopsy findings, there were these atheromatous deposits which diminished the

coronary arteries in caliber. When Mr. Kriesien went to Mexico, the doctor testified that it was impossible to say the extent to which they were diminished.

He also found some thickening and some atheromatous plaques on the aortic semilunar valve. He found a slight dilatation in the auricular ventricular ring, the mitral valve, which I understand is utterly insignificant in this matter. The conclusion as to the cause of death reached by the Mexican doctors that it was due to aortic insufficiency. That is to say an insufficiency of the aortic semilunar valve, which resulted in a sudden acute heart failure.

One translation by a translator said that the aortic insufficiency brought about a sudden heart fatigue. But the Mexican doctor says that means an acute heart failure.

The evidence concerning the autopsy by Dr. Lehman, a pathologist of Portland, Oregon, who examined the remains after it was returned from Mexico, and incidentally, he didn't find much, because it had been completely cleaned, no viscera, including even the brain had been left in the body. He did find the lacerations and the powder burns, but his testimony will be that the facts stated in autopsy do not support the conclusion of the Mexican doctors, that there was an aortic insufficiency.

His testimony will be, and that of Dr. Rush and Dr. Chamberlain, that in any man over forty years, all males over forty will develop atheromatic



plaques on the coronary artery and on the semilunar valves. It's a very common thing to find that in men over forty. It is rare, it is the exception to the rule that they do not have it. But it is believed, and the medical testimony will be for the plaintiff by Dr. Rush and Dr. Chamberlain, that what occurred here was that this man here had [8] this shotgun go off close to his face, inflicting burns and pain upon him, and shock, and that that created a situation which I would rather have him explain, your Honor, but it is the effect that the heart muscle was put under a load which required it to have a greater amount of blood for its own operation and the shock not only produced that, but produced a situation where the heart could not get enough blood for its own operation. And the heart therefore went in an arithmia or lack of proper beat, and went into a ventricular fibrillation, which is a fluttering heart movement and irregular beat, and he expired. The medical reasons for that are definite, and I couldn't possibly state them to you, but generally, those are the facts for the purpose of a brief opening statement. It is the theory of the plaintiff, if the Court please, first, that it is the law that the word "disease" as used in an accident policy of this kind has a special meaning in the law. The word "disease" is actually rather ambiguous in one scientific meaning. In the scientific sense of the term, it means that any departure whatsoever from a perfect state of health is characterized as a disease. The testimony will be that there is almost

nobody in the world that is free under that definition, and it is the plaintiff's theory and we contend that under the laws the courts have held that a contract which would apply that type of meaning to the word "disease" is an absurdity and absolutely headed for futility, and for the purpose of an insurance contract of this kind, the [9] word "disease" means a morbid or serious condition, sufficient so that it interferes with the vital functions that would be considered by a layman, a departure, a significant departure from what we might call a normal state of health, and our evidence will be that that was the case here. This man did not have anything significantly wrong with him. He simply had the thing that almost all men of his age had, and the evidence will be that he was able to do all the ordinary things and do them with vigor, that he was able to undergo strenuous exercise so that his heart was good enough to stand all those. But the only thing that caused it was the sudden shocking traumatic injury of this nature that brought about his death.

The theory is based upon other authority that under such circumstances, even if there were some disease within the meaning of the policy, it was not a contributing cause, but merely a condition which was acted upon by the accident to result in the death.

In that connection, the policy language causes—it uses the words "cause and contributed," and it must contemplate the rules of law relating to causation, so that we contend that this is a case under

the fundamental rule, that here was simply a man with possibly a chest condition at the very most, which was operated upon and was simply unable to resist the effects. It was not a case of a deceased part being aggravated to produce the injury. But simply a weakened condition in the sense that the arterial channel was narrowed, which was unable to handle the [10] traumatic shock. And that, if your Honor please, is the plaintiff's opening statement.

The Court: Just a moment. Are we in a position to take up the other matter, Mr. Clerk?

The Clerk: No, sir.

Mr. Kriesien: If the Court please, in addition to the facts as outlined by the plaintiff, we wish to state that we believe the evidence will show that in May of 1950 the insured, when he was walking across a lumber dock was stricken with a constricting pain in the chest and arm to the extent that he could not hold a telephone.

In February of 1953, the evidence will show that on the 3rd day of February, he was stricken with constricting chest and radiating arm pains, that he sought medical advice from a Dr. McBride and that pain persisted for three days, February 3rd, February 4th, and February 5th. That Dr. McBride prescribed nitroglycerin to relieve the pain condition; that Mr. Lyons inquired about going on this fishing trip and that Dr. McBride advised him that he could do so providing that he refrained from doing any extensive work, such as

heavy lifting or tramping through the fields, and he thereupon departed upon this trip.

I think the facts are substantially as outlined by Mr. Beebe concerning what transpired at La Paz, Lower California. The primary cause of death in the Mexican autopsy was aortic insufficiency and the secondary cause of death given was coronary insufficiency. [11] They gave as an independent cause of death, superficial scratches on the face; gun-powder marks or burns and gallstones. It is, as we believe, pertinent that the man had two gallstones and there was a gallbladder condition that may have been the precipitating cause of an onset of a coronary insufficiency. Based upon the autopsy, the death certificate was issued which gave as the direct cause of death an aortic insufficiency. It is the defendant's position in this case that the plaintiff failed to file a proof of death which showed a loss within the insurance coverages, but to the contrary, affirmatively established that the accidental injury suffered by the insured did not wholly and independently of all other causes result in his death, and that the diseased condition of the heart, either caused or was the contributing factor in the heart death, and the evidence will show by Dr. Rush, that this man did suffer a heart death.

Now, in Oregon, the burden of proof is upon the plaintiff to establish that the accidental injuries solely and independently of all other causes resulted in the death. That a diseased condition did not contribute to or cause the infirmity, or death, I should say.



Now, it is our position in this case that there is no competent satisfactory evidence that the shotgun was accidentally discharged prior to the assured sustaining a fatal heart attack, and it is our further position that there are two basic issues for determination by this Court. [12]

Number one is whether the plaintiff can overcome the *prima facie* evidence of the cause of death as established by the death certificate and establish by competent satisfactory evidence that this shotgun was discharged prior to the assured suffering the fatal heart attack. If the plaintiff sustains that burden of proof, then a second issue will arise and that is whether the diseased condition of the assured's heart caused or contributed to his death, and we believe the factual issues are quite simple and involve those two factors. As I say, the second one will not arise until after the first one, in connection with the question of whether the diseased heart condition contributed to the death. I believe the testimony of Dr. Rush himself will be, and was, upon the taking of his deposition, that a discharge of a shotgun and the emotional upset or reaction or reflex from the fear and the infliction of the superficial injuries, could not have resulted in death, if it had not been for the aortic insufficiency and the coronary insufficiency and under those sets of circumstances, it is the position that the plaintiff will be unable to prevail in this case.

Mr. Beebe: We will call Mr. Robert F. Maguire.

Mr. Maguire: I may say, your Honor, I am one of the counsel in this case, and inasmuch as the

Court, of course, understands the ethics and the rules of the Court here, I am not permitted to argue the facts in the case. I don't know whether your Honor has a definite rule with regard to an attorney testifying and [13] participating in the examination of the witnesses, but merely not to argue the facts. Of course, I am quite anxious to follow your Honor's ruling on that, if I can be advised.

The Court: I have no particular ruling on that, I usually leave that up to counsel if they have no objection, why, it's all right with me.

Mr. Kriesien: I have no objection. [14]

### ROBERT F. MAGUIRE

was thereupon produced as a witness for and on behalf of the plaintiff and, having been first duly sworn, was examined and testified as follows:

#### Direct Examination

By Mr. Beebe:

Q. Your name is Robert F. Maguire?

A. It is.

Q. What is your age, Mr. Maguire?

A. Just reached sixty-nine.

Q. What is your occupation, sir?

A. Attorney at law.

Q. And you are an officer of this court?

A. I am.

Q. Are you a special officer of this court?

A. Yes, I have been standing master in chancery since 1917, until under the new statute, I became

(Testimony of Robert F. Maguire.)

master of the court and I have held that position ever since.

Q. Were you the attorney for Mr. James A. Lyons during his lifetime?

A. I was attorney for Mr. Lyons; I was attorney for the booming company they had, Irwin-Lyons Lumber Company, and for Rolando Lumber Company, which was a California—you might say a subsidiary—as well as his personal attorney.

Q. Are you generally familiar with Mr. Lyons' financial condition? [15]      A. Yes, I was.

Q. Generally, what was it?

A. Oh, he and his wife, and they were partners in the Irwin-Lyons Lumber Company, probably net worth was considerably in excess of \$1,500,000, and I think the state appraised it.

Q. Were you the attorney or executor of the Estate of James A. Lyons?

A. The firm was, and I and Mr. Smith of our firm have been handling it since before the probate.

Q. How long, Mr. Maguire, had you known Mr. James A. Lyons during his lifetime?

A. I think we first became acquainted, and we became acquainted when I became attorney for the Irwin-Lyons interests, about 1936. It may have been '37, but I think it was about '36.

Q. During that period of time, had you been personally in contact with Mr. Lyons frequently or on many occasions?

A. Quite frequently. While this would not prob-

(Testimony of Robert F. Maguire.)

ably apply to every month, I would say that as a rule I was down at the mill, which is at Coos Bay, which is some two hundred odd miles down the coast, at least once a month and would be there on those trips for from two days to maybe a week or ten days, and of course, I had to do his wills, I had a bunch of his personal business during this entire period, and on occasion he would come to Portland, and he had occasion to go back East, to Chicago and St. Paul on business trips, which the latter largely had to do [16] with the acquisition of timber holdings which would be contributory in which the logs would be brought to the mill. We became, in the course of the years very close friends and our families were very close friends.

Q. From your knowledge of the business and his part in it, are you familiar with the amount and type of work that he did; the amount and type of work that he did?

A. Yes. He had gone to sea; he had worked in the woods as a faller and buckler; he had worked in the sawmills; he was an exceedingly active man. While not a tall man and not a heavy man, he was well-muscled and I have been out in the woods with him and all over the south fork of the Coos River and their timber holdings based in the south fork—and many occasions I have been up there when we had litigation for the rights of way and over franchises, and we tramped, at times, up and down the canyon trails. I have been out with him to look at timber, and the incidents of the rights of



(Testimony of Robert F. Maguire.)

way getting into the timber on—oh, I'd say at least conservatively on six or seven occasions, but I think it was probably more.

He was a man of terrific drive, both physically and mentally. He knew every branch of the lumber business, even to the machinery. Many of their—one of the things they devised there during the time—before the logging and trucking industry—log truck industry were using diesel, he devised a means of using in their motors butane and he designed the method. [17]

Mr. Kriesien: If the Court please, I'd like to interpose an objection. This is very interesting, but I don't think it has any relevancy to this case.

The Court: It may be, but the background of the decedent is always of some help to the Court. I will overrule the objection.

The Witness: In addition to that, I won't say on every occasion, but most occasions, when I was down at Coos Bay from '43 or '44 on, he was developing a large ranch which was some five or six miles south of Coos Bay and he would be out driving tractors, the bulldozers, and he was a chap who was on the go all the time. They, in addition to their logging and lumber industries, they also had at one time three or four steamships which were engaged almost entirely in transporting the cut lumber from their mills, what we call rough lumber that the smaller mills would get, carrying it down to the California market. They had an office, a branch in Los Angeles and Rolando Lumber Com-

(Testimony of Robert F. Maguire.)

pany, as I say, in San Francisco and then these various activities around the Bay. Mr. Lyons devised a new method of handling lumber in packing it and loading and unloading lumber which has been a definite help to lumber shipping trade. He was a developer of many things. He was not only a Jack-of-all-trades, but he was a master of a good many of them. He was exceedingly alert, nervous energy as well as physical energy. In fact, he run me ragged in the years when I was a lot younger than I am. [18] He was considerably physically vigorous.

Q. (By Mr. Beebe): What was Mr. Lyons' attitude and his approach toward his work; was it an easy approach or did he give a lot of himself?

A. He went into it, you might say, whole hog. It was his life and his great interest outside of his family interest.

Q. Mr. Maguire, did you have any knowledge of the transaction that Mr. Lyons was engaged in, concerning the purchase of the boat which he had made those trips on to New York just prior to his death?

A. I was familiar with the details. I was familiar with the reasons why he went. The matter of the drafting of the contracts. I spent several days down in Coos Bay. The difficulty arose when the fellows were inclined to back out of it. I know all of those details of it, of my own personal knowledge.

Q. Was that an important matter to the Lyons'

(Testimony of Robert F. Maguire.)

interest?           A. Oh, yes. He was a large shipper.

Q. Are you familiar with—were you going to say——

A. It was considerably larger than the other ships they had. Very considerably larger or whether it was a Victory ship. I can't remember now whether it was a Liberty ship. It was a very large ship.

Q. But they wanted badly to acquire it?

A. Yes; because Mr. Lyons, at that time, was proposing to get a ship and engage in the inter-coastal trade in lumber. The ships [19] they had were operated Pacific Coastwise and this would be able to go to the Eastern Coast, and instead of shipping by rail—and I don't want to give the impression that all of their shipments prior to this time were in their own ships or offshore ships, of course they sold lumber abroad which went on other ships. They weren't interested in that, but this was a new venture, and they were exceedingly interested. It was because of the difficulty in New York, and the sellers had their office in New York—I am trying to be as accurate as I can—I think it was about two weeks or two weeks and a half before the occurrence in California, he was back there for several days and we were negotiating, attempting to negotiate with the Wenasha Woodware Company, which had timber holdings up in the basin, the south fork where the Irwin-Lyons interests were, they had their road system which, at that time, I imagine would be—oh—twenty-five to thirty-five

(Testimony of Robert F. Maguire.)

miles in length, main traveled road. Of course, we had had a number of conferences, that was down in Coos Bay, and the Wanasha people desired to have local counsel here go over the matter, and an appointment had been made for the manager of Wanasha Woodward Company and their two men in charge of their logging to come to Portland and Mr. Lyons and I to meet with them in my office. The date had been fixed and Mr. Lyons took the night plane, and to go across the country, he was up all night. We met as soon as he could get to the room, change his clothes and get a bath and shave and come to my office. [20] We had rather spirited discussions, because Wanasha Woodward Company knew particularly what their interests were and Irwin-Lyons knew, Mr. Lyons knew what Irwin-Lyons interests were. It was very spirited and it went on for hours. I tried to see whether I had any memorandum as to the number of days he was in Portland. It was more than one day. It might have gone as long as three, but it certainly got into the second day, and after that, he left to go down, first to the mill, and whether he was going to San Francisco on his way down to Palm Springs, I don't know, but I know he was going to Coos Bay, and well—that brings that to the end. The hours were long. He did not seem exhausted, except—or tired, except in the morning or, say, immediately after he had been up all night, but his mind was clear. He was vigorous and we arranged to have lunch together. I think one night we had



(Testimony of Robert F. Maguire.)

dinner together and we walked from our office up to the club, which was something like six blocks and he was stepping—while I have got a good long stride, I was having to extend myself to keep up with him.

Now, at that time, there was the question of re-writing his and Mrs. Lyons' wills. I may say that I had drawn the first wills sometime, I think early in the '40's, along in—I have forgotten the date that Congress had posted the Marital Reduction Act, and it was necessary for tax purposes to avail themselves of that. I tried for a number of months to get Jim, and I had been down to the mill or talking on the phone that we [21] get together and get your will drawn up and straightened out. He laughed and would say, "All right." Finally—I was concerned about it because they had a company plane, they had a good commercial plane. It was a twin-engine Beachcraft. There have been—once or twice particularly in the wintertime when they were flying from Coos Bay to somewhere, they had run into icy conditions and on one occasion had a good deal of difficulty in making a landing. I kept telling him, "You're riding in that plane; Irwin is riding in that plane and your wives sometimes ride in the plane, and if that thing don't stay up there and you don't have a modern will, why, you're going to be out." Sometimes I got him on the phone and then he had gone on down to Palm Springs, and I said, "I want to get down there if you're not going to come up to Portland." So he flew up

(Testimony of Robert F. Maguire.)

in their own plane, he was not the pilot, to Coos Bay and from Coos Bay up here and Mrs. Lyons stayed down there so Mr. Lyons and I got on the plane and we flew down to Palm Springs, and I drew their will. I would say they are rather long wills, because both of them had matters of trust for the benefit of the children and some various state taxes and to take advantage of the marital deductions. We couldn't get a stenographer in Palm Springs, so I had to write it down in shorthand and read it to him and had them execute it with witnesses, and then I carried it back to Portland. I had it put in typewritten form and sent the form. Now, while we were there, we were there several days, they had their cottage or [22] house on the Choke Tree Ranch property, the south part of it, and Jim was quite a hunter and he loved wild life. He tramped all over the place, and up to the foothills and in the canyons. He wanted to show me a field bird—I am not a hunter—and I think it was a kind of quail, rustic quail or Mexican quail. It was not the kind of quail we have up here, and then we went down—we tramped over the duck club, we went down to see that and tramped over that. He was interested in the duck club, and we tramped over the fields and looked at the tractors and the seeders, and he was just going all the time.

They had two children, and after the elapse of a number of years, in November of 1952, they had a second little girl, and there was a question of

(Testimony of Robert F. Maguire.)

whether they wanted to make any special provisions for that child in the wills, because they had made gifts to the two older children and those were held in guardianship. Well, I tried to get Jim to come up or let me come down there and go over it, but he was busy and finally on this trip, I said, "Those wills ought to be drawn. If that plane of yours goes down, you have got a lot——"

Q. On the trip, you refer to the business trip?

A. When he came from his business trip to New York and we had these conferences. Well, in the original will Mrs. Lyons had made some special gifts of jewelry, and I said for him to talk to Jane and see what she wanted to do and he said he would see what she wanted to do in connection with Sally. Well, I waited [23] several days and I didn't hear from him. I called him up and I said, "What does Jane want to leave to the baby?" He said, "I think she wants to give the new baby a pearl necklace." I think it was from her jewelry, and that, I am quite sure, was the day before he left on this fishing trip. It couldn't have been more than two days.

Q. You are referring to the fishing trip upon which he died?

A. On which he died, yes. I had started out—I had a rough draft of his will and I hadn't started on Mrs. Lyons' will because I didn't know what she wanted to do. I may say this, he certainly showed no particular interest in getting the will

(Testimony of Robert F. Maguire.)

changed to cover the new baby. He didn't hurry about it and I guess that's that.

Mr. Beebe: That's all, Mr. Maguire.

### Cross-Examination

By Mr. Kriesien:

Q. Mr. Maguire, do you know whether or not Mr. Lyons suffered from gout during the period of years that you knew him?

A. This year—I would think it was somewhere in '49, '50 or '51, I probably could look through my files and get that. He had an automobile accident in Coos Bay on a frosty morning, the car skidded to avoid some youngster on a bicycle. He was thrown from the car. He had a number of broken ribs, his nose was broken and he was badly bruised all over. I saw him, I went down there, not because of the injuries but on business. He [24] had just come home from the hospital. Thereafter, he commenced to show some symptoms of gout. I can speak of this, because there was a claim under the policy for the accident and for the treatment and disability rising at that time. Dr. McKeown was his attending physician there, Dr. McKeown of Coos Bay had the thought that it would be good for him to go down there and get out in the sunshine. I don't know precisely how long he was laid up with that.

The Court: What were his living habits, Mr. Maguire; was he a heavy eater?



(Testimony of Robert F. Maguire.)

The Witness: No, I wouldn't say that he was. I noticed that particularly when we were visiting in Palm Springs. The food was good but it was not lavish. Certainly I would say, although they had help, that their table was probably less amount of food or variety of food than one would expect. No, I wouldn't say he was a large eater.

The Court: Was he a heavy drinker?

The Witness: Occasional drinker, I don't know whether he was a heavy drinker—don't misunderstand me—when I was out with him and he—for a number of months I know he would not take a drink at all. But certainly it was never except for social occasions when we went out to dinner or there at Palm Springs that I think we probably had a couple of cocktails, maybe a couple of highballs. Now, that is my limit of knowledge on that, my own personal observations. I know that for months he didn't [25] drink at all.

Q. (By Mr. Kriesien): Did you ever have occasion to talk with Ross McKeown of Coos Bay about Mr. Lyons' health?

A. Yes, I did. That was the time when there was a question as to whether or not the gout was of traumatic origin and I—and we were negotiating with the insurance company. I negotiated—it was Lloyd's, wasn't it—I believe it was Lloyd's on that and the question was whether or not there were occasions of gout at the time he was put on the plane to go down to Palm Springs. I did discuss with Dr. McKeown about that and I don't know

(Testimony of Robert F. Maguire.)

whether you want me to testify about what our conversation was, but I will be glad to do it, I don't want to volunteer it.

Q. Mr. Maguire, I believe it was Glens Falls instead of Lloyd's that covered that. Could you be mistaken on that?

A. I could be very well mistaken on it.

Q. Did Mr. McKeown ever advise you that Jim Lyons had to slow down and take it easy?

A. No.

Q. Did he ever advise you about the occurrence on May 12, 1950, about Mr. Lyons?

A. You mean at the time?

Q. Or thereafter?

A. Yes, he talked to me about it by long distance telephone on Saturday and I think a number of—no, I am afraid not, that was on the gout proposition. That's the only one I can be certain [26] of was the one recently—on last Saturday.

Q. When you talked to Mr. Lyons the day before, the day or two before he was leaving on this fishing trip; did he tell you about the fact that he was having pain in his chest and radiating pain down his arm?      A. No.

Q. Didn't indicate that he was sick at all?

A. No.

Mr. Kriesien: That's all.

(Witness excused.)

The Court: Call your next witness.

Mr. Maguire: Call Mr. Hawk. [27]

WALTER C. HAWK

was thereupon produced as a witness for and on behalf of the plaintiff and, having been first duly sworn, was examined and testified as follows:

Direct Examination

By Mr. Maguire:

Q. Will you state your full name, Mr. Hawk?

A. My full name? Walter C. Hawk.

Q. And do you have a nickname, that you are known by?      A. Normally called Chick Hawk.

Q. What is your business?

A. I am a gunsmith, sir.

Q. Is that gunsmith?      A. Yes.

Q. Here in the City of Portland?

A. Yes, for a number of years.

Q. About how many years have you worked as a gunsmith?

A. Well, right close on to the half-century mark.

Q. And what makes of guns are you familiar with?

A. Just about all of them, I guess, however, I am more familiar with some than I am with others.

Q. Are you familiar with this gun which you just brought to the courtroom?      A. Yes.

Q. What make is that? [28]

A. That is a Winchester Model 12 magnum shotgun.

Q. Are you familiar with that make of gun?

A. Very muchly.

(Testimony of Walter C. Hawk.)

Q. Are you a representative or do you have any connection with the Winchester arms?

A. I have a gunsmith's agreement which has been in effect many years with the Winchester Repeating Arms Company and also another designation from the Owen Corporation who now owns Winchester and that agreement entitles me to obtain and replace and repair all of those intricate parts which the average individual would not have access to. I believe that covers it.

Q. This gun which I have immediately in front of me was delivered to you by whom?

A. Mr. William Morrison.

Q. From Maguire, Shields, Morrison and Bailey?

A. I beg your pardon?

Q. Now, we have not put any testimony as to where the gun came from, if I may inform counsel.

Mr. Kriesien: You may assure me that this is the gun that was in his possession.

Mr. Maguire: I will now state for the record, that this gun was delivered to me after Mr. Lyons' death by Mr. Howard Irwin, who is one of his business associates and who was the owner of the yacht on which they were making this trip. After receiving it from him, I put it in the vault of the Union Pacific Company [29] Legal Department where it remained until Mr. Morrison, one of my partners, took it out to Mr. Hawk. About how long ago, Mr. Hawk, approximately?

A. Well, I could look on my record. I don't

(Testimony of Walter C. Hawk.)

exactly recall the date, but it's probably been two or three weeks ago.

The Court: Will you accept that statement?

Mr. Kriesien: I accept it, yes, sir.

Q. (By Mr. Maguire): I would like to have this marked as an exhibit. While the clerk is doing that, I am going to ask Mr. Hawk to open it.

A. I should have opened it when I carried it in, however, I am positive that there isn't anything in it.

Q. There is nothing in it?

A. No, there is not. It is perfectly in the clear.

The Court: Are you offering that in evidence for identification or what?

Mr. Maguire: I am offering it in evidence now, your Honor.

The Court: Let it be received.

Mr. Kriesien: No objection.

The Clerk: Marked Plaintiff's Exhibit 1.

(Whereupon, a Winchester Model 12 magnum shotgun, marked Plaintiff's Exhibit 1, was offered and received in evidence.)

Q. (By Mr. Maguire): When you received this gun, Mr. Hawk, did you make an examination of it and its mechanism? [30]

A. Completely, yes.

Q. You took it entirely apart?

A. Yes, I disassembled it. I was very careful when I did it, because I was told to be very careful and make sure that it was looked over thoroughly.



(Testimony of Walter C. Hawk.)

Q. Very well. Did you clean it?

A. I wiped the barrel out because there was some rust in the barrel, however, I didn't clean the action, I merely examined it thoroughly and then replaced it as it was. The gun has some residue and dirt in the action which is accumulative over the period of the use of the gun and I left that as near intact as possible.

Q. Did you cock it and pull the trigger before you disassembled it?

A. Did I cock it and pull the trigger?

Q. Yes, before you disassembled it?

A. Oh, yes, sir. What I done was take the gun down and took the action right out, that was what I was told to do and I didn't—I don't recall—I might have operated it. I don't think that I did because I simply turned it over. I can do the same thing in half a minute or less. All I got to do is take one screw out and take this action apart.

Q. Now, what can you say as to the length of the barrel of that gun, as compared with that of the ordinary shotgun?

A. This particular gun here has what is known as a 32-inch full choke [31] barrel on it, which is two inches longer than the average gun of this type. This is a magnum shotgun and ordinarily they have 30-inch barrels.

Q. What can you say—or withdraw that. When you speak of a magnum, what does that refer to; what does that mean?

A. The magnum is a specially designed and a

(Testimony of Walter C. Hawk.)

specially built gun that will take a shell which is considerably more powerful than the regular, what is commonly called the express field load. In other words, there is more powder and more shot in the shell, and the shell is of longer length. It is three inches over all and the average shell is two and three-quarter inches and the powder charge in the magnum is heavier. Likewise the amount of shot is heavier than the straight express load.

Q. What is the difference in powder load in a magnum shell of that caliber—for that caliber gun as compared with the powder load in the other kind of shell? You say the ordinary shell?

A. Well, in your express load you have a three and a quarter or a three and a half grams of powder and you have one and one-quarter ounces of shot. In the magnum load, which is heavier and a longer shell, you have four and a quarter grams of powder—that is bulk measure, of course—and you have one and five-eighths ounces of shot and that is in the heaviest load. Now, of course, this gun will operate as effectively with any load that is around that par as it would with a magnum. It can be used in the field. These guns are ordinarily what is known as [32] a field load and then if we want a lot of extra soup or pressure for reaching right out there, then they would put the heavier shell in it. It shoots both directions.

Q. Well, what do you mean by that?

A. Well, it backs up just as much as it goes forward. I am not husky enough to handle one myself.

(Testimony of Walter C. Hawk.)

Q. Well now, have you made any measurements of that gun and have you those measurements written down?

A. Yes, I—if it is permissible—I think I have it in my mind. However, the total length of the gun over all is 51 inches from butt to muzzle and I will check it to make sure. I think it was  $13\frac{3}{4}$  inches from the trigger to the base of the recoil pad and  $37\frac{1}{4}$  inches from the muzzle to the trigger. Now, do you want the weight of the gun?

Q. Yes, if you will.

A. Well, I didn't weigh it, but I know approximately what they weigh around  $8\frac{1}{4}$  pounds.

Q. Did you make any other measurement of the gun other than you have described?

A. Nothing, except the—I know what the regulation stock length is and this stock is  $\frac{1}{4}$  of an inch shorter than the average regulation stock. It has evidently been cut back and made to fit some individual.

Q. Now, after—have you made tests as to the condition of the mechanism of the gun, as to whether it was in good working [33] order?

A. Oh, yes. The gun is in perfectly legitimate working order to the best of my knowledge and from what I can determine. I did check the gun to see if it could be bumped hard enough to cause it to explode or to cause the trigger to release itself with the live primer in the chamber. Of course, now, I didn't put a loaded shell in this, I simply took a



(Testimony of Walter C. Hawk.)

loaded shell and removed the powder and shot and left the primer intact and then placed it in the chamber and closed the action, left the safety lock disengaged and then rammed her onto a cement block not once, but a number of times trying to see if it was possible to cause the trigger mechanism to operate. In fact, I struck it so hard that the inertia of the firing pin itself would make a very, very, very slight impression in the primer. But not enough to explode it and I don't think that it could be struck hard enough to cause the gun to discharge unless it was tripped by the trigger, and the safety lock would have to be off to do that.

Q. When you say you jammed it on the cement floor, was the safety off, at that time?

A. Oh, yes.

Q. And is the safety on that gun what—strike that. That question was, does the safety on that gun do anything with respect to the operating mechanism?

A. When the safety lock—the trigger lock as we call it—or the safety lock as commonly known, it's a crossbar lock, that [34] when the lock is placed into position it locks the trigger completely against the sear, which is an integral part of the hammer. It is a notch that is cut into the hammer itself and there is a spring under the trigger which engages the trigger itself against the notch in the hammer lock and whenever this crossbar is pushed over to lock that, it is absolutely solid. It cannot be moved one way or the other. Then, when it is re-

(Testimony of Walter C. Hawk.)

leased, there is a notch in the safety lock which leaves enough room so that the trigger can be pulled back far enough to release the sear from the hammer notch and that in turn releases the hammer and of course that in turn hits the striker. Now, I noticed and checked that very thoroughly for the simple reason that sometimes, it isn't commonly that way, but I have run into one or two in the last fifteen or twenty years that the safety lock would become worn enough that it would allow a creepage in the trigger which in turn would not allow the gun to be discharged when it was pulled back but it would hang and then when the safety lock was released it would go off. But this doesn't show that at all. This is in perfect operation so far as the mechanism is concerned.

Q. Well, when the hammer hits the shell, it hits—what do you call that—a cap?

A. Well, that's all, the first firing pin, that is a striker, we call it the striker. It's the firing pin.

Q. Well, the hammer hits the firing pin; is that it? [35]

A. Yes, the firing pin—I have one of them here in my hand (indicating). This is inserted, it's fastened into the block, in the breach block which is the block that stands behind the shell and this is a reciprocating part of the block itself and it has a safety lock on it which disengages the action until the block is completely into position and locked so that there could be no chance of a blow-back or gas escaping or anything of that nature,

(Testimony of Walter C. Hawk.)

and before you can pull the trigger on this particular weapon it must be locked into position, and when it is locked into position, then the firing pin is automatically released in the block so that it slides back and forth. It travels, oh, not over three thirty-seconds of an inch and it is not an integral part of the hammer. The hammer, it works from a different part of the gun and when it is released it simply comes up on a camber and it strikes on the end of the firing pin, which drives the firing pin forward and it touches the detonator or powder.

Q. What is the nature of the material in that detonator?

A. There are several different solutions. In different ammunition, there are different solutions that are used. However, they are all more or less in the nature of—they are a mercuric composition, all right, ordinarily.

Q. I have heard of fulminate of mercury, is that—

A. Fulminate of mercury is ordinarily the solution used. Now, there are different forms of it. [36]

Q. Well, I don't think—we don't need to go into that. It is made up of something which is in solution?

A. It's in solution when it is poured and then it hardens. Just the same as you make matches. They are in solution when you dip them, too, but they harden.

Q. I see.

A. And then on the inside of the detonator

(Testimony of Walter C. Hawk.)

there is a little anvil which is placed in there which sets up against the primer cup or the battery cup of the shell itself and then this anvil sits in solidly and there is a space in between which is loaded with this primer solution, and the instant that is aggravated by contact or by the blow or by heat or anything that will disturb it, causes a flash, the same as the flash of a match when you strike it. That, of course, kits forward and ignites the powder which develops the gases which drive the load from the end.

Q. I see. Now, did you test the trigger for the trigger pull?           A. Did I test it?

Q. Test the trigger for the pull?

A. You mean for the amount of pressure necessary——

Q. Yes.

A. Yes, I put the regular scale, regular trigger scale, which is not—they are not completely accurate—but they are very, very close to it, within possibly an ounce or maybe less than that. I would say a lot less than that, but I will be conservative and [37] say within an ounce and the trigger pull on this gun, testing it from different angles, there is a slight deviation like pulling against one side or the other, but the very least pull that I could bring on it was approximately  $4\frac{1}{4}$  pounds, and the heaviest pull I could produce was very close to 5 pounds.

Q. Now, how did that trigger pull compare with

(Testimony of Walter C. Hawk.)

the ordinary trigger pull of the kind of gun of that kind?

A. It is heavier than the average pull on a magnum. They are usually heavier than most other guns due to the enormous amount of recoil, but this type of gun is only set to be manually operated, and consequently it is not as necessary to have a heavy trigger as is on this particular type of gun as some of the others. With a lighter pull, the recoil of the first one might kick the next one off, but I would say that this is an average normal trigger pull. Ordinarily my own guns I use it about—in this particular type of weapon, approximately 3 to 3¼ pounds.

Q. In other words, if I may approach the witness, your Honor, if you pull this trigger, it takes more pressure than it would the ordinary gun?

A. Yes, it would. That is, than the average gun. Of course, some of them are heavier than that, but most of them are not.

Q. Now, did you make any tests of taking an instrument and pulling it across the trigger?

A. Yes, I did that. [39]

Q. Not directly back and forth, but across it?

A. Yes. It can be tripped by putting a finger across there and tripping it if you want to do it.

Q. Now, is that gun, assuming that in going through the brush or underbrush and if it caught on a twig, would that gun go off; could that discharge the gun?

A. Well, certainly, it could. It could discharge



(Testimony of Walter C. Hawk.)

by swinging and hooking on a bootstrap if it happened to strike the trigger. Sure it could, you bet your life. Any gun can if the safety lock is off.

Q. I see. But if you had the safety lock on, whether it is pulled against a piece of wood, a trigger or twig or anything like that, it couldn't be discharged?

A. No, you could take a hammer and pound it, you could break the trigger, but you cannot discharge it otherwise, you would have to break something to do it.

Q. Now, is there any way or—strike that. Is there such a thing as a defective primer or what do you call it?

A. Yes.

Q. If there is a defect in the cap, would a shell explode?

A. Well, from a jar or something of the kind it could, yes, it could.

Q. Have you known instances where a gun did discharge, when a trigger was not activated?

A. I know of two instances where revolvers were—not a revolver— [40] one was an autoloading pistol, that were dropped and those guns did discharge without the primer being crimped in the gun. I don't know of any cases where a gun has discharged from a defective primer. Of course, primers, that would be one in a million or something of the kind. That is possible, yes. It is possible a jar could do it.

Q. What kind of a defect would have to exist in the primer of a shell to enable this to happen, what you just testified about?

(Testimony of Walter C. Hawk.)

A. A crack through the solution from—well, for instance, if you had poured solution in the primer itself and that was to have been cracked in some manner or broken so that there would be the tiniest type of friction, then it was jarred so that those two or those integral parts of that solution itself, which is itself not unlikely, that it could happen to go off, but it would be the same thing as handling a dynamite cap and sticking a needle into it. The heat from the needle would be enough to explode it, and if those parts in there were jarred and if they happened to be fractured in any way, those parts of the solution itself, it is possible that it could ignite. I dropped a shotgun shell one time on the floor and it went off. It just went off. That's all. It was right out of a brand new box. Now, that could happen, but it's very, very, very seldom that you ever hear of anything of that kind and in fact, it's so seldom that a lot of people think you are crazy if you talk about it. I have witnessed two occasions that did explode that way over a period [41] of forty years.

Mr. Maguire: You may inquire.

### Cross-Examination

By Mr. Kriesien:

Q. Mr. Hawk—— A. Yes, sir.

Q. To discharge this shotgun by having it come into contact with a twig, do I understand that that twig would have to exert a pressure of approximately  $4\frac{1}{4}$  to 5 pounds? A. It could, yes.

(Testimony of Walter C. Hawk.)

Q. And it would require a tugging on a twig, would it not?

A. Yes, it would require a striking or a pulling blow or whatever you might want to call it of that much, because that is what the trigger registers and reads.

Q. And likewise, you mentioned about a contact with a bootlace, that would also have to be caught—or bootstrap—and exert a pressure of  $4\frac{1}{4}$  to 5 pounds?

A. Any type of pressure that was put on the trigger, providing the lock is disengaged, and that it is in the firing position, it wouldn't make any difference how it was done, you could drop a rock on it or strike it and it would knock it off or you could hook it onto something and it could knock it off. There is a thousand ways that those things happen. They happen every day. You pick up the newspapers and read about it, because he didn't have his safety lock set. [42]

Q. All right. Mr. Hawk, one other question. In your examination of that gun, was it plugged or would it hold five shells?

A. Well now, I didn't take the magazine down because that had nothing to do with the action. I don't think—I can tell you in about a half a minute by examining it right here. I never removed the magazine at all.

Q. Would you be so kind as to examine it, Mr. Hawk?

A. Yes, you bet. I didn't have any idea about the magazine, because this bolt up here is going

(Testimony of Walter C. Hawk.)

up the barrel and the forearm, and this is the best end right here, in here (indicating). I can mighty soon tell you, all I have to do is check it with a pencil. This magazine is plugged, sir.

Q. Thank you, you may resume the stand, Mr. Hawk. What do you mean by a plugged shotgun?

A. Well, you see in certain states, such as Oregon, Washington and quite a number of the states, they have a law in effect, it's been in effect for some time, that no gun could be used in the field with over three loads in it. That is in a shotgun and these guns are built to take five shells in the magazine and one in the barrel or one in the barrel or four in the magazine and it is according to the length of the magazine on them, they will then function and operate five shots without reloading, and consequently there has to be a firm plug in it that couldn't possibly be removed unless you disassemble it. So that in the states where this law is in operation, if you [43] got caught out in the field with a gun that will function and operate even though you have only got it loaded with three shells, if they check it and find out that it will take more, you are subject to confiscation and so on and so forth.

Q. Then, as I understand it, Mr. Hawk, this gun being plugged would hold two shells in the magazine and one in the chamber?

A. Two in the magazine and one in the chamber, that's correct. That is two magnum shells as

(Testimony of Walter C. Hawk.)

I notice there from the length of the pencil, that I don't think it—well, it wouldn't be possible to even put three field loads in the magazine, according to the length of the pencil, unless my guess is way off.

Q. Thank you, Mr. Hawk, that is all.

The Court: You may be excused, sir. Next witness.

Mr. Maguire: Call Mr. Neal. [44]

### LEONARD LEROY NEAL

was thereupon produced as a witness for and on behalf of the plaintiff and, having been first duly sworn, was examined and testified as follows:

#### Direct Examination

By Mr. Maguire:

Q. Where do you live? A. Coos Bay.

Q. How long have you lived in and around Coos Bay, Coos County?

A. Around that area most of my life, right at Coos Bay about twenty years.

Q. What is your business? A. Logging.

Q. And have you run a logging business of your own? A. Part of the time, yes.

Q. And have you acted as the logging superintendent or woods superintendent for any concerns?

A. Yes, for Irwin-Lyons.

Q. How long were you employed by Irwin-Lyons?

A. Just a little bit of a guess, but I think about sixteen years.



(Testimony of Leonard LeRoy Neal.)

Q. During all of the time, were you engaged as woods superintendent? A. That's right.

Q. What were your duties?

A. Oh, generally woods supervision. [45]

Q. Does that mean you were in direct charge or supervision of the logging crews?

A. That's right.

Q. Your logs being loaded out from the woods, was that under your supervision?

A. That's right, the whole operation.

Q. The whole woods operation. Where was the—where were the logging operations of Irwin-Lyons Logging Company for five or six years prior to 1953?

A. Well, they are on the south fork of the Coos River, out from Coos Bay, I'd say from thirty miles to fifty along in this stretch of country.

Q. Did the Irwin-Lyons Lumber Company build roads into this district themselves?

A. That's right.

Q. Did you have anything to do with the road building? A. Would you repeat that?

Q. Did you have anything to do with the road building?

A. Well, yes, considerable, about the same as the rest of the logging operations.

Q. I take it you were well acquainted with Mr. James A. Lyons; were you not? A. Sure was.

Q. How long had you known him?

A. Well, I have always known of him, probably twenty-five years, knowing him very well.

(Testimony of Leonard LeRoy Neal.)

Q. Had he had any woods experience?

A. Oh, all of his life, more or less.

Q. And had he had any sawmill experience?

A. Yes, a great deal.

Q. Can you state whether or not he was mechanically inclined?      A. Very much so.

Q. When you were employed as woods superintendent, did you have any occasion to see and be with him frequently?

A. Oh, quite often, yes. He was very much out to see what was going on. I have been out in the woods with him a lot.

Q. And what can you state as to his vigor or activity?      A. Well——

Mr. Kriesien: May I inquire as to what time?

The Witness: Well, I always figured he was very much alive in traveling around, I had to try to keep up with him mostly, rather than him with me.

Q. (By Mr. Maguire): When was the last—possibly how long before Mr. Lyons died was the last time you and he went into the woods together?

A. Well, I can't say.

Q. Approximately. One month, three months, six months or a year?

A. Probably not more than two months, I'd say anyway.

Q. And was that up in the basin of the south fork of Coos River? [47]      A. That's right.

Q. By the way, what is the nature of the land; is that land rugged land or what is the situation?

A. Well, they said there was to be flats that we

(Testimony of Leonard LeRoy Neal.)

were going to log on, but I never found them. It was pretty rugged.

Q. And in order to go over a piece of woods work when you were laying out a road or looking at timber, you had to do that on foot?

A. Well, we had to go ahead of all roads and look at the timber and check the roads out and so forth.

Q. And did that involve physical exertion of any extent, going and looking those things over?

A. Very much so.

Q. Now, did you have an opportunity—strike that. Did your duties require you to come into the mill office there at North Bend?

A. Yes, occasionally I was in there quite often.

Q. And did you have any occasion there to discuss your duties and the program of the company in logging?

A. Yes, I made it a point to be in there quite often to talk it over with them in regards to the work out in the woods. He was my boss.

Q. I see. You saw him quite often in regard to the work. Well, as between Mr. Irwin and Mr. Lyons, which one of those two would you say you came into contact with? [48]

A. Well, with Mr. Lyons, practically all my activities.

Q. Now, at any time, did you ever see or know of anything regarding any physical disability of Mr. Lyons' breathing or color or anything of that kind?

(Testimony of Leonard LeRoy Neal.)

A. I never noticed or never heard him complain, he never complained to me.

Q. He was as active in the last year of his life as he had been in the previous years?

A. Well, I would think so, pretty much. Of course, I myself had slowed down quite a lot. I couldn't have noticed, but it seemed to be about the same.

Q. You said he made no complaint about being able to breath or having pain or anything like that at any time to you?

A. Not to me. I never noticed anything like that.

Q. What can you say as to what his temperament or energy or lack of energy?

A. Well, I always figured he had too much energy.

Q. I think you may inquire.

### Cross-Examination

By Mr. Kriesien:

Q. I believe you stated, Mr. Neal, that the last occasion you had to be with Mr. Lyons was some two months prior to his death?

A. It could have been right around there, he was up in the woods.

Q. Were you aware of the time when Mr. Lyons had his gout [49] condition? A. No.

Q. He never mentioned that to you?

A. No.

Mr. Kriesien: That's all.

The Court: You may step down, Mr. Neal. It's almost twelve-twenty.

Mr. Maguire: Your Honor, we could possibly put in the testimony of Dr. McBride.

The Court: Let the record show that I am thoroughly familiar with the deposition of Dr. McBride. The record will show that I have read it and will read it again.

Mr. Maguire: Thank you, your Honor, then may we have the original filed with the Court and received in evidence, if the Court please?

The Court: Yes, that will be received in evidence.

Mr. Maguire: In that case, your Honor, we might just as well adjourn. We have no short witnesses or anything of that nature.

The Court: We will adjourn until two o'clock.

Mr. Kriesien: If the Court please, I have a short memo here as to the laws as I promised the Court I would give it.

The Court: This is in response to the memo filed?

Mr. Kriesien: Not in response, just a separate memorandum.

The Court: Very well, thank you. Two [50] o'clock.

(Whereupon, at 12:20 p.m., the noon recess was taken until 2:00 p.m., after which proceedings were had and done as follows:)

The Court: Proceed.



Mr. Maguire: May it please the Court, we would like to offer in evidence exhibits which I would like to have marked.

The Court: It may be received and marked.

(Whereupon, exhibits were marked as Plaintiff's Exhibits 3, 4, 5, 6 and 7 for identification.)

Mr. Maguire: At this time, may the Court please, the plaintiff offers in evidence exhibits numbered 3, 4, 5, 6 and 7, which have been so marked for identification in evidence.

The Court: They will be received. May I inquire was the deposition of Dr. McBride No. 2?

The Clerk: Yes.

Mr. Maguire: If your Honor please, Exhibits Nos. 5 and 6 for identification are the Glens Falls Indemnity Company policies and the proof of the loss that apply to the case in that connection, and in connection with the proof of loss, if your Honor please, it is stipulated between counsel that the same exhibits were attached to this proof of loss document as were attached to Exhibit No. 7 for identification, which is the proof of loss to Lloyd's, and the doctor's affidavits and so forth. Counsel don't have them, and he asked to see them and we are agreed that these were the same as to both proof of loss [51] that is in—that is the inclusion.

Mr. Kriesien: So stipulated.

Mr. Maguire: So we now offer them in evidence.

The Court: They will be received in evidence.

Mr. Kriesien: No objection.

(Whereupon, Plaintiff's Exhibits Nos. 3, 4, 5, 6, and 7 were offered and received in evidence.)

Mr. Maguire: Your Honor can read them at his leisure.

The Court: Very well.

Mr. Maguire: If your Honor please, we have a motion picture operator and his equipment coming, and we were wondering if we could put Mrs. Lyons on, and withdraw her as soon as he comes?

The Court: That will be satisfactory.

Mr. Maguire: Will you take the stand, Mrs. Lyons? [52]

JANE S. LYONS

the plaintiff above named was thereupon produced on her own behalf and, having been first duly sworn, was examined and testified as follows:

Direct Examination

By Mr. Maguire:

Q. Will you state your full name, please?

A. Jane S. Lyons.

Q. Jane S. Lyons?

A. Jane Sullivan Lyons.

Q. And you are the widow of James A. Lyons, the deceased in this lawsuit?      A. I am.

Q. What was Mr. Lyons' age at the time of his death?      A. Forty-nine.

Q. When were you and Mr. Lyons married?

A. 1936.

(Testimony of Jane S. Lyons.)

Q. How many children were born of that marriage?      A. Three.

Q. And their names and ages?

A. Their present ages are James Stuart Lyons, our son, now 15. Susan Jane Lyons, 12. Sally Atha Lyons, 3.

Q. Sally was the baby that was born in November of '52, was she not?

A. November 15, 1952.

Q. November 15, 1952. At the time you married Mr. Lyons, what [53] was his business?

A. He was in the lumber business.

Q. In what?      A. Lumber business.

Q. Sawmill or logging or what?

A. Sawmill and logging.

Q. At that time, with whom was he associated?

A. I beg your pardon?

Q. At that time, with whom was he associated?

A. Howard W. Irwin.

Q. And that was prior, was it not, to the organization of the Irwin-Lyons partnership; isn't that true?      A. Yes.

Q. At that time, did they operate what was known as Mill B?      A. Yes.

Q. And there were certain logging companies procured and the lands in the woods?

A. That's correct.

Q. Now, about what was Mr. Lyons' general physical characteristics as to height, weight or whatever? You just explain it as well as you can.

A. His height?

(Testimony of Jane S. Lyons.)

Q. That's right.

A. Height 5 foot 8 inches, weight 165 pounds to 160 pounds and what was a very [54] energetic personality, a busy man.

Q. Well, that was at the time you were married or during the time of your married life together, were there any changes?      A. Of what aspect?

Q. I mean as to his activity.

A. Oh, he was always—always had been a very active person. I could see no difference from the time we were married until the time of his death, so far as his general characteristic of being an active person.

Q. Was he interested in his business?

A. Very definitely.

Q. Do you know whether or not he went out in the woods to look at timber or the operations during this period?

A. Yes, that was definitely his interest and all in the business and his knowledge, so that he spent a great deal of time in the actual operation of the business.

Q. You and Mr. Lyons acquired a rather large farm out in the outskirts of Coos Bay about five or six miles south of the city; didn't you?

A. That's correct.

The Court: Mr. Maguire, would you mind speaking a little louder? I am not deaf, but there is so much noise, that I have difficulty hearing you sometimes.

Mr. Maguire: I have been having a good deal of

(Testimony of Jane S. Lyons.)

dental work done, and I have a considerable amount of difficulty. What was [55] the last question, Mr. Reporter?

(The question was read.)

Q. (By Mr. Maguire): And about when did you acquire that property?

A. Over a period of years we owned the ranch property where the house is now situated, which we term the south side of the road at the time we were living in town before we moved to the ranch, perhaps six years before we moved there. After we moved there a period of four years ago, we acquired more property.

Q. The property you call the south side property, is the south side of the county road; is that correct; that bridge across the slough?

A. Yes.

Q. And the rest of the property is to the north of that? A. Yes, it is.

Q. About how many acres is embraced in that?

A. A total of close to 500 acres.

Q. Did Mr. Lyons run cattle on that property?

A. Yes, we had Black Angus breed.

Q. And you raised horses?

A. That's right.

Q. I am not speaking about farm horses, were they blooded horses? A. Yes.

Q. Did he take any interest in the running of that ranch as well as other business interests? [56]

A. Yes, he did.



(Testimony of Jane S. Lyons.)

Q. Did he work there at the ranch in off hours or week ends with the actual operation of the ranch?

A. To a certain extent. We kept hired help on the ranch.

Q. Do you remember the occasion when the meadow fields to the north of the road were diked and floodgates put in there?

A. Yes. As to just exactly when that was, I don't remember.

Q. And did he take interest in that?

A. Yes, he was supervising that to see that it was done according to the way it should be.

Q. Was he a man of quite placid disposition or was he an active person?

A. Certainly not quiet or inactive, very active.

Q. What can you say as to whether that continued up to the time of his death?

A. Activity? Yes, very definitely.

Q. Now, I believe you and he acquired a piece of residence property in Palm Springs several years before Mr. Lyons died?

A. Yes, we did.

Q. And did you build on that?

A. Did we build upon it?

Q. Yes. A. Yes, we did.

Q. But you did not purchase the house?

A. No, we built the house. [57]

Q. And did Mr. Lyons supervise that and take an active interest in the improvement of that property?

A. To the extent that we were there during the building, which was done in the summer months but

(Testimony of Jane S. Lyons.)

we made frequent trips to consult the architect and to supervise, but not there during the actual building time to any extent.

Q. Now, that was on what was known as the Smoke Tree Ranch property; was it not?

A. That is correct.

Q. And did Mr. Lyons take any interest there in any hunting clubs or—not at Coos Bay—or Palm Springs, down in Palm Springs proper, but it was in the valley? A. Yes.

Q. Now, was there any—perhaps, your Honor, so we could get rid of this gentleman with the movie camera now?

The Court: Yes.

Mr. Maguire: You may step down, Mrs. Lyons. Would it be satisfactory, your Honor, if we put the screen up on this table (indicating)?

The Court: Surely, any place that is convenient.

Mr. Maguire: I may say, your Honor, that those pictures which we are now about to display were taken by Dr. Chamberlain. He is going to take the stand later and I would like, with your Honor's approval, that as they are being shown, Dr. Chamberlain, who is in the court now, give the narrative of where [58] and what circumstances these pictures were taken and we will then put him on the stand for testimony. While that is going on, your Honor, we may have the roll of film marked for identification?

The Court: Let it be marked.

Mr. Beebe: Counsel has seen it and we now offer it in evidence.

The Court: It may be received in evidence.

The Clerk: Plaintiff's Exhibit 8.

(Whereupon, Plaintiff's Exhibit 8 was offered and received in evidence.)

Mr. Maguire: Doctor, will you be sworn, please?

### FRANCIS CHAMBERLAIN

was thereupon produced as a witness for and on behalf of the plaintiff and, having been first duly sworn, was examined and testified as follows:

#### Direct Examination

By Mr. Maguire:

Q. All right now, as the film starts, Dr. Chamberlain, I want you to explain it.

A. This film was taken about twenty-four hours before the accident, when we were on the boat between Frales Bay and Cape San Lucas, this is Lower California. In the vicinity—this is our ship with the fishing gear out as we were fishing for marlin.

Q. And when you see an individual in the pictures, will you please tell who they are?

A. Yes. I don't think I have to explain that I am an amateur. That's Dr. Rush and Mr. Lyons just behind him as they are fishing. Dr. Rush in the foreground and James Lyons in the background. We had our gear out for fishing for marlin, we were us-

(Testimony of Francis Chamberlain.)

ing the small rod, and the scene that we are just about to see, is where Dr. Rush is about to get a Sierra mackerel and Mr. Lyons is just beyond. That's Dr. Rush and Mr. Lyons is just beyond Dr. Rush. That's Howard Irwin with the high cap there pulling in the small fish. A Mexican pulling in Dr. Rush's Sierra mackerel and this was—it don't show—this was a fish that [60] we lost. Those are porpoises over in the distance that are all diving. The next scene will be the marlin—there is the marlin. Those are—those are porpoises, I am sorry. Now, this is going to be the marlin which Mr. Lyons has hooked. Now, you can see it jump. We estimated it to be about 200 pounds and to be about six feet long, and this one he played for about a half an hour. This was the first marlin I had seen, but the boys and the old-timers explained that this was a good-sized one. In fact, it was so big that finally it broke the line and we lost it, after Mr. Lyons played it for about a half an hour. The Mexican boy who is standing there—that's the pole that is up—that Jim Lyons' line is playing the fish with and now the fish has broken the line. This is Cape San Lucas and the entrance to the harbor as we came in. That's at the very tip of Lower California where we landed and stayed, it was on shore. That's looking at the country on the shore where we were hunting doves. This is the area just in back——

Q. Well, there seems to be a fairly flat level ground there and the hills in the back?

A. Yes. This is Mr. Lyons on the ground and

(Testimony of Francis Chamberlain.)

Homer Rush is pointing out the car and the road nearby, the mesquite bush and the sand.

Q. Is that Mr. Lyons' body?

A. That's Mr. Lyons' body against the mesquite brush and Dr. Rush pointing. That is Senor Ruiz, the port captain who took us on [61] the hunting expedition. That's where we go in and out of town to try to get word to the police and the village up above. Just the scenes of the town while we waited to try to get word through to the police. That's Mr. Howard Irwin going into the telegraph office. This is just a small Indian village of about 3,000 people at the tip of Lower California, and it was about a mile and a half from this little village where the accident occurred. Dr. Rush there, and I don't think there is any more pertinent—I am not sure—it's been quite a while since I've seen this film.

Q. You had taken some other film?

A. I took two more rolls of film back at the body, including all of the inquest, and the local physician, the man who was in charge of the autopsy, insisted that I destroy, in their presence, the two rolls of film.

Q. However, this one you saved?

A. I had gone back to the ship to get more films and had left this one on board. No explanation was given to me as to why, but we were in trouble and anxious to please the locals so that I didn't object.

Mr. Maguire: If it please your Honor, we happen to have blown up in black and white several pictures of the body lying there.



(Testimony of Francis Chamberlain.)

The Court: That's what I was going to ask you.

Mr. Maguire: I think we can proceed, your Honor.

The Court: Very well.

Mr. Maguire: Mr. Clerk, I would like to have you mark and [62] give exhibit numbers to these three photographs.

The Clerk: Plaintiff's Exhibits 9, 10 and 11.

(Whereupon, three photographs were marked by the clerk as Plaintiff's Exhibits Nos. 9, 10 and 11 for identification.)

Mr. Maguire: May I approach the witness, your Honor?

The Court: Yes.

Q. (By Mr. Maguire): I hand you here, Doctor, a photograph which is marked Exhibit 9 and see if you recognize that.

A. Yes, I do. Dr. Rush is in the foreground and Mr. Lyons in the background.

Q. That's one of the pictures that were on the film? A. Yes, sir.

Q. Except not in color, and then I hand you a photograph marked Exhibit 10 for identification, can you state what that is?

A. Yes, that's Mr. Lyons' body lying in the sand after the accident.

Q. Was that taken after he had been moved and the tarp or blanket or what not put down?

A. It was when I first saw him and I was about a mile away at the time of the accident, and I didn't see him before that tarp had been put there.

(Testimony of Francis Chamberlain.)

Q. I see. The next is Exhibit 11 and Exhibit 11 is what?

A. Dr. Rush in the foreground and Mr. Lyons in the background, at the time Dr. Rush caught his fish. [63]

Q. And the yacht, I think you called it the "Go-Gee"?      A. The "Jo-Jay," yes.

Mr. Maguire: We offer them in evidence, your Honor.

Mr. Kriesien: Let me see them. We have no objection.

The Court: They may be received in evidence.

(Whereupon, three photographs marked Plaintiff's Exhibits Nos. 9, 10 and 11 were offered and received in evidence.)

Mr. Maguire: That's all. We will withdraw him temporarily as the expert testimony and get the full story about this situation later from the witness.

Mr. Beebe: If your Honor please, we will call Dr. Christen, please. May I have, at this time, these marked as exhibits?

The Clerk: Plaintiff's Exhibits 13 and 14 for identification.

(Whereupon, documents were marked by the clerk as Plaintiff's Exhibits 13 and 14 for identification.)

Mr. Beebe: May the Court please, at this time the plaintiff offers in evidence Exhibit No. 12 for identification which is a photostatic copy of the report of the inquest in Spanish.

The Court: Let it be received.

Mr. Beebe: Together with a translation which shall be displayed to counsel, and which is Exhibit No. 13 for identification.

Mr. Kriesien: No objection.

The Court: It will be received.

Mr. Beebe: And Exhibit No. 14 for identification, which is a transcription in the Spanish of Mr. Kriesien's cross-examination [64] of Dr. Serrano, one of the Mexican doctors, together with a translation attached thereto, which Mr. Kriesien, counsel for the defendant, has extended to us.

Mr. Kriesien: No objection.

The Court: It will be received.

(Whereupon, Plaintiff's Exhibits Nos. 12, 13 and 14 were offered and received in evidence.)

Mr. Beebe: Has the witness been sworn? [65]

#### DR. JOSE J. CHRISTEN

was thereupon produced as a witness for and on behalf of the plaintiff and, having been first duly sworn, was examined and testified as follows:

#### Direct Examination

By Mr. Beebe:

Q. Will you state your name, please, Doctor?

A. Jose J. Christen/Y/Florencia.

Q. How old are you?

A. I am twenty-seven years old.

Q. And what has been your education?

A. After I finished high school, I took two years of college in the University of Mexico, and then I

(Testimony of Dr. Jose J. Christen.)

had six years of medical training in the University of Mexico. The full name of the university is——

Q. Well, Doctor, it has already been written on this piece of paper and so that it is correct, we will give it to the reporter and he can take it off. (Universidad Nacional Autonoma de Mexico.) And what degree did you get at the University of Mexico City?

A. Physician and surgeon.

Q. Doctor of medicine and surgery?

A. M.D., corresponds to M.D.

Q. I see. And after your graduation from medical school, did you do an internship?

A. We are required to do internship prior to your graduation out, [66] so I had one internship in Mexico General Hospital, Mexico City, and then I thought I wanted to have more training and I came to the United States as an exchange visitor. I went to Iowa, and I was at the Iowa Lutheran Hospital in Des Moines, and I took a regular rotating internship. After that, I went to Phoenix for surgical training. I trained in St. Joseph's Hospital in Phoenix, Arizona, took first year of surgical residency, and then I made up my mind about pathology and Dr. Lehman was so kind as to take me in his laboratory in the Good Samaritan Hospital here in Portland.

Q. And when was that?

A. I started on October 1st.

Q. Of this year?                      A. Of this year.

Q. 1955, and you are associated with Dr. Lehman?

(Testimony of Dr. Jose J. Christen.)

A. I wouldn't say associated, I am under his supervision.

Q. I see. May I have the Spanish document that I just introduced in evidence—that was too—may I approach the witness, your Honor?

The Court: Yes.

Q. (By Mr. Beebe): Doctor, I hand you a photostatic copy of a report of inquest which was conducted in Mexico, and I wish to refer you to the portion beginning "Dictamen emitido por los Peritos." Do you see where I am?

A. Yes. [67]

Q. Now, Doctor, at our request—that is Mr. Maguire's and mine last evening, long about 10 o'clock, did you examine this document and start to work on a translation on that immediately?

A. Yes. I examined the document and I wrote a translation of the part that corresponded to the physician's—or what they say—I don't know what would be the straight wording——

Q. An autopsy report?

A. It is not quite an autopsy report. In Mexico, it is called "the lifting of a cadaver," raising it. The physician is asked to go and to examine the cadaver inside where it is. No one should have touched it and find anything that is surrounding it or corresponding to the death, and then he is authorized to take it over to the morgue or any place where the autopsy can be performed, and then the autopsy report and the conclusion which would be the diagnosis.



(Testimony of Dr. Jose J. Christen.)

Q. I see. A. So, that's what I translated.

Q. That's what you translated? A. Yes.

Q. Now, when you translated it, Doctor, for the Court, will you read it in English, that portion that you have?

A. I quoted it down—I could—can try to translate it from memory without the written part, or I could read my translation anyway.

Q. Well, will you read your translation? [68]

A. I have it here.

Mr. Maguire: May I suggest, for clarification, if the witness can translate one sentence at a time in Spanish and then give it in English.

The Witness: O.K.

The Court: Well, I will tell you what I'd like to do, I would like to take a copy of the Spanish and follow the doctor as he translates.

Mr. Beebe: Fine, I have another one here, your Honor, so you won't have to get down.

The Witness: Well, he could read the report to me and I could tell him the translation.

Mr. Beebe: Would that be satisfactory to your Honor or should I hand him this other one?

The Court: All right. Where do you want to start reading?

The Witness: Where it says "Habiendo sido——"

The Court: "Habiendo sido solicitados por el." What does that mean there? Translate as much as I have read.

The Witness: "Having been asked by the prosecutor of the town as auxiliary coroners"—I thought

(Testimony of Dr. Jose J. Christen.)

that was the translation, I don't know the American legal term—but these are the authorized physicians to go and check the cadaver, as I referred before, and they are not the nominees, but they are auxiliary. I mean it's not quite the ones that had the title, but they were auxiliary coroners. The underwritten proceeded to the place [69] called Los Llanos at 10 a.m. on February 15, 1953, on the Cape of San Lucas."

The Court: On the 10th——

The Witness: "On the 10th of February to Los Llanos on the Cape of San Lucas, to inspect the cadaver of an individual of American citizenship."

The Court: Now, did——

The Witness: "To run on an individual——

The Court: Of American nationality?

The Witness: Of American citizenship. Nationality doesn't quite give the same idea.

The Court: I know, it is used in Spanish to indicate a citizen?

The Witness: Yes. It's an impersonal term which is difficult to translate in English. And then I used the past tense and says, "When we removed to the above-mentioned place a cadaver" and there is where you stopped.

Mr. Kriesien: If the Court please, we have a certified copy in typewriting of the original.

Mr. Maguire: I think it may be a little easier for your Honor to read.

The Court: Let's see. Where were we now?

The Witness: "En la que se——

(Testimony of Dr. Jose J. Christen.)

The Court: What line is that on your page?

The Witness: Well, eight from the dictamen.

The Court: Well, this is going to be a long and painful process, gentlemen, now I can understand this and I am willing to accept the doctor's translation of this. The best I can see from the way it is, his translation is correct, if you are willing to accept that.

Mr. Kriesien: I am going to accept that, if I can refer to the translation later.

Mr. Beebe: We will accept that.

The Court: Then I will let the record show that I will go over the translation and compare it with the original if it is satisfactory to counsel.

Mr. Beebe: That is satisfactory.

Mr. Kriesien: That is satisfactory.

The Court: I want to take a recess for about twenty-five minutes, there is a gentleman, a friend of mine that came in. The Court is in recess.

(A short recess was taken.)

The Court: Proceed.

Mr. Beebe: May I have this marked? Dr. Christen, you handed me the written translation which you have made and it has now been marked Exhibit No. 15 for identification, is that the written translation that you have made?           A. Yes, this is it.

(Whereupon, a document was marked by the clerk as Plaintiff's Exhibit No. 15 for identification.) [71]

Mr. Beebe: We offer it in evidence, if the Court please.

The Court: All right.

(Whereupon, Plaintiff's Exhibit No. 15 was offered and received in evidence.)

Q. (By Mr. Beebe): Now, Doctor, I hand you Plaintiff's Exhibit No. 14 in evidence and ask you to give a translation of that. That is the interrogation, your Honor, of Dr. Serrano by Mr. Kriesien and the answers which he gave.

A. It says, with a Roman number here, in our translation we found the part—it didn't say part—but it should say it concerning—that says, then in quotation marks "congested lungs and they were cut sections, a black liquid blood seeped; the superior and inferior lobes of the left lung were," and then an undistinguishable word——

A. It says, with a Roman number here, in our translation we found the part—it didn't say part—but it should say it concerning—that says, then in quotation marks "congested lungs and they were cut sections, a black liquid blood seeped; the superior and inferior lobes of the left lung were," and then an undistinguishable word——

The Court: May I inquire, Doctor, did you not make that translation?

The Witness: This is not a translation.

The Court: You mean you are translating it at sight?

The Witness: At sight, yes.

The Court: All right.

The Witness: And a word that has no meaning in Spanish, and then as if someone were asking it, "is this the correct translation," and then it says, "Yes," but it is obvious that someone made a mistake there, instead of what they should say "funcionados," so they probably asked him the right question. I remember in [72] the original document

(Testimony of Dr. Jose J. Christen.)

that it says, “funcionados,”—I mean—it is not a good word.

The Court: Well, we are not here to criticize the use of the word, Doctor, we are just trying to get as literal a translation as we can.

The Witness: I mean not as good, but I mean—I am criticizing the spelling—it is not spelled right.

The Court: I can see that.

Q. (By Mr. Beebe): What did you think the word should be and what did you think that means “funcionados”?

A. I think it means fused together, meaning one single entity.

The Court: A fusion, in other words?

Mr. Beebe: Of the lobe of the lung?

The Court: I think it is obvious that’s what the word means because the manner in which it is spelled here.

The Witness: In the two documents, they have different opinions, and the two—when I answer “Yes,” I don’t think that anybody can just use this word for anything in Spanish. It doesn’t exist in Spanish, because I thought—or I think it must be a typographical error, and does this mean there was no congestion of the left lung and the answer “Yes.” There was in some part of the thing they said that both lungs were congested so it is only natural they answered they were congested. This is exactly the word mentioned over there and “funcionado” means that it is made in only one part, and I still say this is not [73] the right word and it should say “fun-



(Testimony of Dr. Jose J. Christen.)

cionados." Maybe their region they used, but they do accept that it—the fact was that it would make it one part, with this word they are making that—they are making just one entity, the lungs were in one entity, so at——

The Court: All right, let's go on to the next section.

The Witness: "Was there any evidence of anti-mortum clotting or embolus in the pulmonary artery," and they say, "No" and then second—in our—this is not right—in our translation the pericardium is thickened with adhesions to the diaphragm and is that correct, and they say, "Yes." Then "Was the heart free from the pericardium in the pericardim" and they answer, "Yes." Then "Was there any adhesion to the wall of the heart," and they say, "No." This is confirmatory of the one part. "Was there any evidence of pericarditis in the wall of the heart?" They answer, "No, the evidence of pericarditis was the thickened pericardium and the adhesion to the diaphragm."

The Court: I agree with you so far.

The Witness: Thickened pericardium means or had the meaning of an increase in the normal pericardium and they say, "Yes," so the pericardium was thickened, the pericardic liquid was increased, "Was this a normal aspect or was it purulent?" Answer: "It was cirrhosis, which corresponded pretty close, and it was not turbid like in acute pericarditis, as it would be in acute pericarditis, but it was transparent. Then third, [74] in our translation it says the "aortic sigmoid valve in English

(Testimony of Dr. Jose J. Christen.)

are called the semicircular or semilunar valves and were thickened and hardened.”

The Court: Engrossed?

The Witness: That means they were—that they were thickened and hardened with atheromatous plaques. Is this a correct translation? And they say, “Yes.” And we found that there was hypertrophy of the left ventricle and then fourth, coronary arteries. Our translations were dissected and atheromatic plaques were found.

The Court: Literally, it means encountered atheromatic plaques.

The Witness: After the time they did that, they said, “Is this translation correct?” and they say, “Yes.” What is the meaning of “los cuales”? And they mean which this is a little screwed up because if I don’t know English and someone asks what is “los cuales,” I would have a lot of trouble. I would tell you in Spanish.

The Court: Well, that is when they answered, they said, “Which?”

The Witness: But this has nothing to do with the medical——

The Court: What coronary artery——

The Witness: What coronary artery was diminished. The anterior and posterior coronary arteries. In Mexico, we call it the anterior near the left coronaries and posterior near the [75] right coronaries. That was not in English. “Which was the diminishment in the diameter? Impossible to answer.” They didn’t know. I mean—they—I don’t know—they just couldn’t answer it—then five, in our translation

(Testimony of Dr. Jose J. Christen.)

relative to the biliary stone or gallstones. "Abdomen, liver red dark increased in weight and size, hardened or resistant to the cut section."

The Court: In other words, you mean he had a hardened liver; it was difficult to dissect?

The Witness: Yes. "Gall bladder full of green dark bile in approximate amount of 40 c.c. He has two gallstones. One of one centimeter and the other one of three millimeters in diameter. Is this the correct translation?" and the answer is "No."

The Court: It is the following—

The Witness: It is the following. The gall bladder was full of green dark bile in an approximate amount of 40 c.c. containing two gallstones, one of one centimeter in diameter lodged in the union of the cystic canal with the common bile duct, what we call the common bile duct, and also one smaller of three millimeters in diameter in the fundus of the gall bladder. Both were free. Five, our—

Mr. Beebe: That's the English translation?

The Court: I want to say for the record, that the doctor's translation appears to me to be an adequate one and a correct one, if you gentlemen are willing to accept that. [76]

Mr. Kriesien: We are, you understand. We have not had an opportunity to examine the translation, the other feature of it.

The Court: Subject to any corrections that you care to make, gentlemen, if it is determined that such corrections are to be made.

Mr. Beebe: You may cross-examine.

(Testimony of Dr. Jose J. Christen.)

Cross-Examination

By Mr. Kriesien:

Q. May I have No. 15? That is the doctor's translation.

(Document is handed to counsel.)

Q. (By Mr. Kriesien): Doctor, did you have occasion to examine a translation of the Mexican autopsy performed by John W. Wilson and compare that with your translation?

A. Not in total.

Q. With reference to the autopsy?

A. Yes.

Q. Or investigation by the doctors?

A. Yes.

Q. I have not had an opportunity to go into it, in detail, but were there any variances in any material aspects between your translation and that of Dr. Wilson?

A. At the time I examined it, I had not made my written translation, but I noticed some differences in what I would say and what the translation said, so you could find some differences, yes.

Q. But not in any material aspect? [77]

A. I beg your pardon?

Mr. Beebe: If the Court please, the witness does not know what the issues are in this case, and so to ask him whether it would be different materially, I don't think it is competent.

(Testimony of Dr. Jose J. Christen.)

The Court: Well, I think I will allow the question. I can realize how one translator of a particular document might use an entirely different expression which would amount to the same thing, but which would be different language. It wouldn't change the substance of it, whatever that is. I think this is the way of getting it.

Mr. Kriesien: I am asking if it is different, and the doctor practically admitted that the spelling is erroneous in some particular, and I would like to get this cleared up. This is Plaintiff's Exhibit 13, which is the translation performed by Mr. Wilson.

(Document handed to witness.)

Mr. Kriesien: On page 16.

Mr. Beebe: Shouldn't he also have the Spanish——

Mr. Kriesien: I am going to compare the English translation on page 16. Let us go down to the part about the heart, after upper and lower left pulmonary lobes were functional. That would be the 13th line from the bottom.

The Witness: Yes. The upper and lower left pulmonary lobes were functional. This must be "were fused."

Q. (By Mr. Kriesien): All right. You have in your translation [78] "the semicircular valves of the aorta were thickened and hardned with atheromatic deposits." Now, is that semicircular or semilunar valve?



(Testimony of Dr. Jose J. Christen.)

A. That is no difference anatomically.

Q. I see.

A. In Spanish, that is "sigmoid."

Q. You use the word "mitral valve," is that the same as the left you use in your translation of it, "mitral valve slightly hypertrophied, the left auricular ring slightly dilated"?

A. Yes, it corresponds anatomically to the same thing. I wanted to—it says here "of the aortical"—it should say "aortic."

Q. I see. I believe that is all, your Honor, there is no variance between the two translations, I can see, that are material.

### Redirect-Examination

By Mr. Beebe:

Q. On this question, Doctor, of the word "functional," that appears in this translation, is that the same one that you said probably was a typographical error, and should be fused, made one?

A. In the paper I just read, I don't remember the numbers you put for them, in that paper the Judge read for me, that's the discussion of that word before——

The Court: Well, the word used in one of the Spanish papers there, is absolutely meaningless in Spanish. It either intended to mean functioned or functional or fused, one or the other, but [79] it's obviously a typographical mistake.

Mr. Kriesien: I am just wondering, your Honor,

(Testimony of Dr. Jose J. Christen.)

whether the same error prevailed in the autopsy report or in the supplemental report.

Mr. Beebe: Yes, it did. This translation that we offer says that the superior and inferior left lung lobes are functional, and the translator said "fused." So it apparently means that they were fused, and it was a typographical error; is that right, Doctor?

The Witness: Yes.

Mr. Beebe: Thank you, Doctor.

Mr. Maguire: Last night, Doctor, when we were going over it, you came to one word which you said, and I think it was with regard to one—the word in Spanish was given, it means striated, and you said that was an erroneous translation in it?

Mr. Beebe: The word, that Spanish word was "felatado," and you thought that there had been a typographical error, that the typist had made a mistake, and it should be "dilatados."

The Witness: Yes.

Mr. Beebe: In your translation, which meant dilated?

The Witness: I put the one for dilated. I thought that that word is never used in medical terms to design something in the heart of that kind.

The Court: What was the word?

The Witness: Filatado. [80]

The Court: It would be meaningless.

The Witness: It could be ragged, something like ragged, but in their—I think in the papers, I

(Testimony of Dr. Jose J. Christen.)

show somewhere else that the word "filatado" is suppressed entirely.

Mr. Beebe: In the later paper, the second one you read, it said "dilated"?

The Witness: Yes.

Q. (By Mr. Beebe): And so that you believe that the original Spanish word "filatado" was a typographical error?

A. Dilitado, which is dilated, and in this translation, the translator assumed that it was dilated, because it is such an odd word in Spanish that he recognized that there was an error. I can see—the auricular ventricular ring slightly dilated. So the other one, I think, could be pretty well forgotten.

Q. He made the same correction that you did because of the fact that it didn't have any meaning, the "filatado"?

A. Yes, he made the same correction.

Mr. Beebe: That's all, your Honor.

Mr. Kriesien: Nothing further.

The Court: You may be excused, Doctor, thank you.

(Witness excused.)

Mr. Beebe: Call Dr. Lehman. [81]

## DR. WILLIAM LEWIS LEHMAN

was thereupon produced as a witness for and on behalf of the plaintiff and, having been duly sworn, was examined and testified as follows:

## Direct Examination

By Mr. Beebe:

Q. Will you state your name, please, Doctor?

A. William Lewis Lehman.

Q. Are you a duly licensed and practicing physician and surgeon in the State of Oregon?

A. Yes, I am.

Q. And do you have a specialty?

A. Pathology.

Q. Doctor, would you describe for the Court your educational qualifications?

A. I graduated from the University of Minnesota in 1938 and the Bachelor of Medicine. I made the regular rotating internship duly recognized. I received a Doctor of Medicine degree, following which I practiced internal medicine in North Dakota, following which I spent a year in pathology in the University of Minnesota, graduated, following which I spent a year in the pathology department as an instructor at the Fort Wayne University Medical School in Detroit, following which I spent four years in the Navy as a pathologist. Then I spent two years as a fellow instructor in pathology in the pathological department at Columbia University at New York City, following that time, I have come here to practice pathology as a director at [82] Good Samaritan Hospital.

(Testimony of Dr. William Lewis Lehman.)

Q. Doctor, are you a lecturer or teacher and the head of the department of pathology?

A. I have had an appointment at the medical school, my appointment is now in effect.

Q. Have you, at any time, done teaching elsewhere?

A. Oh, yes. I taught at the University of Minnesota in the department of pathology and in the pathology department at Duane University and those of New York were all of a teaching nature.

Q. And do you, Doctor, hold a certificate as a specialist in pathology, or is there such a thing?

A. Yes, I have what is called a board—I mean a diplomate in pathology in both clinical and anatomical fields.

Q. Dr. Lehman, have you had an opportunity to view the translation of the Mexican autopsy prepared by Mr. Wilson in which Dr. Christen testified to on the stand?

A. I have seen one translation. I have not seen the translation Dr. Christen made last evening after he left me.

Q. You have seen the one which is in Exhibit No. 13 in evidence, have you not, Doctor?

A. Yes.

Q. Now, I will hand you Exhibit No. 15 in evidence, which is the translation of Dr. Christen and ask you to read that, if you will, please, to familiarize yourself with it.

A. You want me to do it out loud, Mr. [3] Beebe?



(Testimony of Dr. William Lewis Lehman.)

Q. No, just read it so that you are familiar with it.

A. This is in essence, essentially as much as we discussed last evening.

Q. And except for the matters that were discussed on the stand, essentially the same as the Wilson translation? A. Yes.

Q. Now, Doctor, were you engaged to attempt the autopsy upon the body of James Lyons?

A. Yes, I was.

Q. Where did you go to attempt to perform that autopsy? A. In Coos Bay, Oregon.

Q. And were you able to perform such an examination?

A. Only a very sketchy one, inasmuch as the remains had already been autopsied and the important viscera had not been returned to the deceased.

Q. Now, what did your examination consist of, what did you find?

A. Well, I examined the remains as carefully as I could under the circumstances, upon arriving in Mill's Funeral Home in Coos Bay. We found that the body had been sealed in a metal container and around it, set on the top, there were boards closing the metal container, which I was told was necessary for the transport of the body. The roof of the metal container was soldered and with a small acetylene torch we removed it and found that the body had been totally wrapped in clean white cotton which was thoroughly formalin soaked, and we removed the cotton and then [84] inspected

(Testimony of Dr. William Lewis Lehman.)

the body as closely as possible. It was then that we noticed the viscera of the thorax and the abdomen were absent and had been replaced by a similar clean white formalin soaked cotton again. Only a few small organs remained and they were, namely, the bladder; prostate gland, and a portion of the terminal rectum. In examining the cranial cavity, we found that it, too, had been opened by the physician and the top of the bony part of the head had been replaced but prior to this, the brain had been replaced with cotton, again which was thoroughly soaked with formalin. So my examination was limited chiefly to what one might say was an inspection of the body.

The Court: May I, just as a matter of inquiry, Doctor, what useful purpose could be served by removal of the brain in a situation of this kind?

The Witness: Any autopsy examination to be complete, your Honor, must include an examination of the brain, and I presume that these Mexican physicians attempted to discern the presence or absence of any disorder which might have precipitated this man's death.

Q. (By Mr. Beebe): What did you find then upon your examination?

A. The chief findings, those that represented the deviations from normal were abrasions or what I interpreted with the knowledge I had at the time as powder marks which were found on the posterior surface of the body, the back so to speak, in the

(Testimony of Dr. William Lewis Lehman.)

area generally called the wings of the back, and I found some on [85] either cheek and one in particular close to the lid margin on the right and another or possibly two on the right ear, that was all.

Q. Did you find any powder marks on the tip of the shoulder? A. Yes, there was some.

Q. I beg your pardon?

A. These linear abrasions were several centimeters—they appeared to be several centimeters long and they were raised two or three millimeters, but it was, they represented tracks of some traumatic agent, let us put it that way, these raised welts were colored blue and their tracks were generally upward and outward toward the scapula and the shoulders and the cheeks and the ear.

Q. Now, Doctor, have you, in your experiences, performed a large number of autopsies upon men around forty-nine years of age; between thirty and fifty; men in that age group?

A. I have performed a good many autopsies of people of all age groups, yes, sir, men and women.

Q. But your experience with men, have you had considerable experience with men in that age group?

A. I would say that it was considerable, yes.

Q. Now, in conducting those autopsies upon men who have died from all kinds of causes, have you had occasion to examine the coronary arteries and the arteries of men in that age group?

A. Yes, an autopsy precludes avoiding the heart. It is an [86] important or can be an important part and it is a part of every autopsy, and naturally the

(Testimony of Dr. William Lewis Lehman.)

arteries are a routine part of the examination of this organ.

Q. Now, what percentage, could you say, of men in that group, show atheromatic deposits in the arteries and on the semilunar valves together with stiffening of the aorta?

A. This is a difficult question to answer in this respect, that by saying is there or is there not an atheromatous change, one's criteria to the presence or absence may vary from examiner to examiner. One man might say, "I wouldn't call this as hardening of the arteries unless there is a considerable degree." Another man may say, "I will feel that anything which is a deviation from the norm is a hardening of the artery," but any man near the age of fifty, let me say it this way, almost every individual around the age of forty-nine or fifty will have some arteriosclerosis. Some arteriosclerosis may involve the heart valve. I mean, it is not concentrated there, but it is found in greater degrees elsewhere in the arterial system. Arteriosclerosis is an aging wear and tear process and by the time fifty comes I think most of us already have some such change.

Q. Would it be fair to say then, that the complete absence of sclerosis in the arterial system would be the exception rather than the rule in men of that age group?

A. If you could put it not quite so strongly, I think I would go along with that, because every once in a while we do encounter [87] people even



(Testimony of Dr. William Lewis Lehman.)

older than that who have no arteriosclerosis at all, but that is the exception, to be sure.

Q. That is the exception? A. Yes.

Q. Now, Doctor, when an autopsy surgeon reports that he has found atheromatic deposits and that the coronary arteries are diminished in caliber, but cannot say how much, can you tell from that how much arteriosclerosis or atheromatic deposits there was from the reports?

A. No, because as I have just previously mentioned, the criteria of one individual and another varies. One might say considerable amount means 50 per cent loss of the caliber. Another man seeing the same change might say there is, say, well, there is only a moderate degree, so that such a description is not as accurate as it might be and it would have been better, had the examiner actually attempted to estimate the percentage, loss of lumen of these vessels.

Q. What do you mean by the "lumen"?

A. The lumen is the openings in the pipe.

Q. I see. The amount of caliber loss?

A. A one-inch pipe is a one-inch pipe, and a one-inch lumen is the same thing.

Q. In the Mexican autopsy there is nothing to indicate the degree of decrease in the lumen; is that correct?

A. It is. There is no specific indication. It is their impression [88] of the degree of caliber loss through diminishment by the presence of atheromatic deposits.



(Testimony of Dr. William Lewis Lehman.)

Q. Now, Doctor, with respect to the stiffening of the aortic semilunar valves, with some atheromatic deposits, is that a condition that you customarily find in autopsies of men between forty and fifty, who have died of other causes, other than some heart causes?

A. Once again, counselor, if you could make it not so strong, yes, but it is not an uncommon occurrence at all in men of his age.

Q. And now, Doctor, if a man had died of an acute aortic insufficiency, as the Mexicans found, would you have expected to find an enlargement or dilation of the aortic ring?

A. Yes. By the very definition of the conditions one would expect to find a ring of increased size.

Q. So, does the Mexican autopsy show that there was any enlargement found on the autopsy of the aortic ring?

A. There is no mention made of the diameter of the aortic ring, so that from that interpretation here, one cannot say that there was any increase or decrease in the circumference of the aortic valve system.

Q. Doctor, could you observe that they did find a dilation of the mitral valve?

A. That is—there is a reference to it as a dilatation or dilation of the mitral valve, it is mentioned, but the degree [89] here is not mentioned, nor is there any mention of the circumference of this valve ring.

(Testimony of Dr. William Lewis Lehman.)

Q. So then they apparently discovered some dilatation of the mitral valve ring, but they found no dilatation of the aortic valve; is that correct?

A. My interpretation of the autopsy protocol is such.

Q. Doctor, if you were to examine and find no dilation of the aortic ring, could you bring a conclusion of the death from acute aortic insufficiency which produced a sudden heart failure?

A. Such a conclusion is not very likely. Now, I don't see how one can. In an aortic insufficiency, one usually would have described an enlargement of the ring.

Q. In your opinion, then, Doctor, do the factual premises that the Mexican doctors found on their autopsy support the conclusion to the conclusion that the death occurred due to an acute aortic insufficiency?

A. No, they do not.

Mr. Beebe: May I have just a moment, your Honor?

The Court: Very well.

Q. (By Mr. Beebe): Doctor, in your experiences, have you ever performed an autopsy upon a man who died of aortic valve disease where there was not a history of heart murmurs?

A. That is perhaps a difficult and perhaps even an unfair question to answer for this reason. In today's hospitals, where there is a shortage of interns to fill the hospital needs and to [90] make proper physical examinations, and take proper histories, there is an occasional occurrence where an

(Testimony of Dr. William Lewis Lehman.)

individual, dying of heart disease of valvular lesions, as you pointed out, reaches the autopsy people without such a notation on the history, and therefore in that way, I must say I have posted people in which there have been no sufficient history, but on the other hand it is difficult for me to envision or to reason the likelihood of the absence of any from my stand at the autopsy table, to envision or figure the likelihood of the absence of any physical signs wherein a severe valvular lesion was actually present.

Q. Well, Doctor, if a man had been examined by a competent and experienced doctor, specializing in internal medicine, and had exercise tolerance tests and no murmurs were present, would you say under those circumstances that a death from aortic valvular heart disease would result?

A. Assuming that the individual had a severe enough aortic valvular lesion, and assuming that the internist, the man examining the patient, was a careful examiner, and assume that his exercise tests were carefully conducted, I would say this, under those circumstances, a man with a severe heart lesion would present some findings to the examiner.

Q. It would be a murmur?

A. If not a murmur, a thrill or a pulse of some sort.

Mr. Maguire: What do you mean by "thrill"?

A. A thrill in some of those heart lesions the changes are so [91] severe and so strong that merely placing the hand upon the chest will produce to the

(Testimony of Dr. William Lewis Lehman.)

internist, a thrill or a little shaking, a little beating, so to speak, of the tissues overlying the heart.

Q. (By Mr. Beebe): Now, Doctor, I want to question you a little more about atheromatic plaques or deposits if I might. Would this diagram (indicating) help you in explaining about those?

A. Yes.

Mr. Beebe: May I have this marked?

(Whereupon, a chart of the heart was marked Plaintiff's Exhibit 16 for identification.)

Mr. Beebe: Now, I think I can put this where your Honor can see that.

The Court: I can see it fine.

Q. (By Mr. Beebe): Doctor, I wonder if you would step down and bring a pencil. You might number this No. 1, No. 2 and No. 3 and No. 4 and No. 5. Now, Doctor, referring to this diagram of No. 1 there, would that be a section of an artery?

A. Yes; this is strictly diagramatic representation of a blood vessel, which I am sure in this case, counsel intended to represent a coronary artery which is the one supplying blood vessels to the heart. The inner dark line would represent the inner single cell layer which provides a smooth surface, over which the blood flows. The inner line, so to speak, of the blood vessel underneath which is a small protective layer, and outside of which is muscular coating which covers this vessel and gives [92] its insulation, and then, not really shown, is a still further peripheral layer of connective tissue which covers



(Testimony of Dr. William Lewis Lehman.)

this whole structure. All of this is preamble to the small yellow area, which is intended here, I am sure, to indicate one of the early changes of heart diminishment which is found immediately under the inner lining and not involving the muscular coat and is present as a small collection of fluid and perhaps beginning fibrous tissue is the earliest changes in what might be considered concerning the function of the arteries.

Q. Now, for your purposes, you have used the arteriosclerosis, and we have been talking about atheromatic deposits. Now, will you describe the correlation of those two?

A. Arteriosclerosis means any disease of the blood vessels. Atherosclerosis is a part of arteriosclerosis in which there is a typical change in it. This type usually is indicated by the depositing or laying down of cholesterol, a fatty deposit, which gives an atheromatous change to the disease, therefore the atheromatous plaques in the arteriosclerosis.

Q. Now, Doctor, referring to figure two; what does that indicate?

A. Figure two, I would interpret to mean a more advanced form of number one. This is how the thing grows. This small area of edema, and the fibrous tissue deposition soon becomes yellow dormant deposits of cholesterol, and [93] now beginning to restrict more the opening of the lumen in that artery, and perhaps begins to encroach on the muscular coating.



(Testimony of Dr. William Lewis Lehman.)

Q. Now then, referring to number three, is that a picture of the situation after the deposit has grown even greater? A. Yes.

Q. Now, an autopsy surgeon finding any condition from one through three, how would he report that? Would he report atheromatic deposits?

A. Anyone looking for arteriosclerosis, and even after these indications would show that there was coronary arteriosclerosis, there was atherosclerosis in the coronary arteries, so that the description may mean anything from this state to stages much worse.

Q. Now then, how about number four; what is that situation?

A. Number four is once again a more advanced form of number three, only here now, the covering—of lining, they have caused back here has been eroded and ulcerated away and calcium, the material that forms may follow and so on is deposited here, and in the fibrin, one of the deposits of fluid is deposited there, so that this merely represents a severe form in which is now ulcerated stone, so to speak, atheromatous plaques, and the reduction in caliber.

Q. And is the reduction in caliber greater at that stage [94] than in three?

A. Oh, yes; but that is obvious, but this change, this calcification becomes greater, this nodule becomes enlarged.

Q. Now, Doctor, when it is advanced to the point where there is some calcification, is that apparent to the autopsy surgeon where there is calcification?

(Testimony of Dr. William Lewis Lehman.)

A. Oh, yes. One notes it really upon cutting it across with a knife. It grates, it does not cut.

Q. And would you say, that an autopsy surgeon in performing an autopsy, if he encountered that grating, would likely report a calcification, if he found it?

Mr. Kriesien: If the Court please, I object to Mr. Beebe asking this witness as to what another autopsy surgeon would or would not do.

The Court: Objection sustained.

Q. (By Mr. Beebe): Now then, Doctor, going along to number five, what does that picture there show?

A. This small red line (indicating) is what the physician calls a vasa vasorum, and these blood vessels themselves must have some nutrition, and these small blood vessels come from the inside, and they supply the wall of the blood vessel itself, because it too must have some sort of nutrition. Now, it is possible that in the development of an atheromatous plaque, that the destruction of the wall of the artery, the blood vessels may involve one of these nutritive vessels, [95] open it up, and permit a hemorrhage to occur, and the pathologist has the name that we sort of like to use for that, and he calls it coronary apoplexy, meaning hemorrhaging in the coronary artery, and usually it is into one of these calcium atheromatous plaques.

Q. Now, is that discoverable upon autopsy, that there is anything of that kind?

A. Yes, one doing a careful examination would

(Testimony of Dr. William Lewis Lehman.)

find that certain of the reddish material, dark red, perhaps, we call it friability, a good many use the word for the yolk of an egg, and may be fairly consistent, but it is meant to develop steadily.

Q. I believe you said on that situation there, there would or would not be the calcification that would result from the laying down of the solution, as I understand it?

A. Yes, but counselor, you must remember that calcification—the fact that it occurred in some as atheromatous plaques, may be completely absent in others and develop in other regions.

Q. I see. Thank you very much. If the Court please, we offer the Heart Exhibit Number 16 for identification.

Mr. Kriesien: I have no objection for the purpose of illustration.

The Court: It may be received for the purpose of [96] illustration.

(Heart Exhibit Number 16 received.)

Mr. Beebe: You may cross-examine.

The Court: I think, counsel, in view of the fact that I have a pre-trial conference set at four o'clock, and it is about four, you might defer until tommorrow morning?

Mr. Kriesien: That will be fine, sir.

The Court: And may I ask if it will be all right with counsel if we start at nine-thirty in the morning?

Mr. Kriesien: Yes.

(Testimony of Dr. William Lewis Lehman.)

Mr. Beebe: Yes.

The Court: Thank you. Court is adjourned.

(Whereupon, an adjournment was taken until 9:30 o'clock a.m. of the following day.)

(Pursuant to adjournment proceedings were resumed at 9:30 o'clock a.m., November 23, 1955.)

The Court: Proceed.

Mr. Beebe: May the Court please, I should like to ask Mr.—Dr. Lehman a few more questions on direct examination. Mr. Kriesien has not started on cross-examination.

DR. WILLIAM LEWIS LEHMAN

recalled as a witness on behalf of the plaintiff, having been previously duly sworn, testified further as follows:

Direct Examination  
(Continued)

By Mr. Beebe:

Q. Dr. Lehman, you mentioned some indurations or welts at the site of the powder burns?

A. Yes.

Q. If the man had died instantly, if his heart had stopped instantly, would those swellings have developed? A. No.

Q. What is the minimal amount of time that he would have had to live after the incrustations of the powder in order for the indurations to appear?

(Testimony of Dr. William Lewis Lehman.)

A. At an absolute minimum, this man should have lived at least eight to ten minutes, because these raised areas presumably from the shotgun blast were composed of swelling, and if a thing occurs and causes an induration, it indicates there must have been some circulation to produce the swelling [98] and the blood in these areas where he was injured.

Q. Now, Doctor, did this Mexican autopsy show any congestion of the lungs and liver?

A. According to the report, there was some congestion of the lungs and a mild or minimal amount in the liver.

Q. How long—what would be the minimal time that a man would have to live for that to develop?

A. Well, let me put it this way: If a man were to die suddenly, promptly, having been in good health, there would be no swelling of the liver, providing there is no additional or other disease producing this change. There would be no congestion in the lungs so that I would feel, it's my opinion, that a man would have to continue to exist, to live eight to ten minutes at a minimum, in order for congestive changes to form in the lungs and for blood to collect in the liver to indicate that it was congested.

Q. Would that indicate an abnormally fast rhythm of the heart for a short period of time?

A. I think you want me to understand that would such a situation develop if this man were living and his heart were irregular and/or had a



(Testimony of Dr. William Lewis Lehman.)

spasm, would this being within eight to ten minutes. Yes, it could.

Q. Could it develop in four to five minutes?

A. Well, it isn't as likely to develop. It is a hard decision to make. It's not likely to occur in that time.

Q. Would it be possible for that to occur with a very rapid, [99] irregular beat?

A. Well, it would be very difficult to detect in those few minutes.

Q. One more question, Doctor. Did I ask you if a death—the death of this man whose autopsy you have seen had occurred from a coronary thrombosis, would the examination of the arteries have revealed that? A. Yes.

Q. Does it reveal that?

A. According to the autopsy report?

Q. Yes.

A. No; there is no mention of a clotting, a thrombos, in the coronary circulation. There is only a report of atheromatous plates.

Mr. Beebe: You may inquire.

Mr. Kriesien: No cross-examination.

The Court: You may be excused, Doctor.

(Witness excused.)

Mr. Maguire: You may resume the stand, Mrs. Lyons. [100]

(Testimony of Jane S. Lyons.)

Q. Did you and he occupy the same bedroom?

A. Yes.

Q. Did he, on that occasion, complain of any pain of any kind?           A. No.

Q. Did he rise during the night complaining of any discomfort?

A. No, to my knowledge he slept through the night.

Q. Now, when did you learn—first learn that he had gone down to Dr. McBride for examination or treatment, whatever it might have been?

A. The next morning, which would have been a Friday morning or Thursday morning, depending upon—I am just hazy on which day—at least it was the morning after he arrived home from the trip, I was going out to play golf and Jim said, “I am going down to see Dr. McBride.” I was rather under the impression that he had an appointment with him, so I said, “I will see you later,” and when he got back, he said, “I went in for a check-up,” which he often did, but not often did, but I mean, usually he was there once a year, [103] but I was under the impression that it was not anything out of the ordinary, so I didn’t question him any more about it. So it was the following day then, after the day before he left to go on the trip that he said that he had had this pain in his chest and had gone down to see Dr. McBride and see what was wrong, and so I said, “What did he tell you?” And he said, “Well, I have heart fatigue,” and I said, “Are you going to go on a trip, do you know what

(Testimony of Jane S. Lyons.)

that means?" And he said, "Yes, the doctor said it would be good for me to go and have a good time and relax," so that was the extent of it.

Q. By the way, did you learn at that time or before he left that he had any nitroglycerin pills?

A. Yes, I did, because that was what brought it to my attention.

Q. Well, I think you left that out.

A. Well, when we were sitting out on the patio, I noticed this in Jim's pocket, and I went over and, of course, as soon as I saw nitroglycerin, I said, "What are those for, are they for a heart condition?" And he laughed and he said, "Yes, I had this pain in my chest is why I went down to the doctor." And I said, "Is there anything wrong," and he said, "No, he termed it heart fatigue, and if I have any need of these, I want for you to have them along to take one." So that was, as I say, what brought it out of where he mentioned to me [104] that he had this pain in his chest, and why he had gone to see Dr. McBride.

Q. Did he tell you when he had the pain in his chest?

A. Yes, then he said it was the night he arrived home.

Q. Now, did he appear to be disturbed or despondent or melancholy or anything like that?

A. Oh, no. He was in very good spirits.

Q. By the way, perhaps I can avoid this, I understand we conceded this was not a question of any suicide?

(Testimony of Jane S. Lyons.)

Mr. Kriesien: That's right.

Q. (By Mr. Maguire): Mrs. Lyons, Jim was in a rather serious automobile accident some several years before; was he not?

A. Yes, he had been in an automobile accident.

Q. Now, were you there in Coos Bay?

A. No, I was in Palm Springs and Jim had gone up to the mill, and it was while he was up there in Coos Bay that the accident occurred.

Q. And did you immediately come up to Coos Bay?

A. I came up, I think it was the following—two days later.

Q. And did you know anything about the extent or the place where he was injured or how he was injured?

A. It was—I have forgotten—it was crushed ribs, is what seemed to be the general injuries and just generally banged up, but the rib injury was the thing that seemed to be the more serious part [105] of it.

Q. And did he suffer any injury to his nose?

A. Not at that—well, I mean about that, Mr. Maguire, he had broken his nose several different times, yes. He did. He developed a cut across his nose.

Q. Well, now, this—

A. But that wasn't at the time that he had the operation on his nose. He did have a cut across his nose.

Q. And I said previously—I believe you said he

(Testimony of Jane S. Lyons.)

was otherwise banged up?           A. Yes.

Q. Who attended him on that occasion?

A. Dr. McKeown of Coos Bay.

Q. Now, this chest pain, the only chest pain you have told us about, is that the only one you ever knew about?           A. Yes, it is.

Q. Do you know whether that occurred at night or whether it occurred in the morning; what did he tell you about that?

A. He said it occurred at night when he went in. Evidently it was my thought that when he first went to bed he felt tired and he had this pain in his chest, so he went to bed early.

Q. When he arose in the morning, did he make any complaint about it?

A. No, I was not aware of it at all.

Q. Now, after he got out of the hospital in Coos Bay, he [106] was brought back to the house; wasn't he, from the hospital?           A. Yes.

Q. And remained there in Coos Bay for about how long? I appreciate the fact that you didn't keep a diary of it, but as close as you can recollect?

A. A week or ten days, maybe.

Q. And then where did he go?

A. And then we went down to Palm Springs.

Q. And while he was in Palm Springs, did he cough up any fluid from his lungs?

A. I don't remember that, whether he did or not.

Q. I mean, you don't remember whether that happened at any time after he got home?

A. No, I don't.



(Testimony of Jane S. Lyons.)

Q. All right, that's all right. Now, did he develop any pains or aches or untoward physical condition after he got down to Palm Springs?

A. Yes, he did.

Q. Will you tell the Court about that?

A. I believe it was the following day after we arrived, he said, "I don't feel good, and I think I should see the doctor," and so I called a local doctor.

Q. That was Dr. Feniman?

A. Dr. Feniman, and Dr. Feniman was not in town, so the office nurse asked if I would like to have a substitute doctor [107] from their clinic, and I said, "Yes, I would," so he came out and examined Jim, and at that time, as I remember—it's rather hard to know just what a doctor is trying to explain at times, but it was like a fluid from this injury where these ribs were crushed and so forth, that was brought about—whether it was aggravated, I don't know what, but there was a fluid condition there that it takes a certain length of time for that sort of thing to be absorbed and that was the condition.

Q. Was that doctor Dr. McBride?

A. Dr. McBride.

Q. And did Jim complain either then or as the matter developed about any pains, any place else in his body?

A. In his foot, his right foot, as I remember, but I am not sure which foot it was, but there did develop this painful condition in his foot.

Q. Well, were you, at that time, informed what that was?

(Testimony of Jane S. Lyons.)

A. Well, Dr. McBride was not sure, and when Dr. Feniman came back, he said, "I would like to have Dr. Feniman examine Mr. Lyons," and together they came to the house and both determined—called it a gouty arthritis, and I asked at that time what that was. I said, "Well, I always thought of the gout, but I had never heard of a gouty arthritis," so they explained to me that that type of—

Mr. Kriesien: If the Court please, I would like to [108] interpose an objection at this time. I think this is going pretty far under the realm of hearsay.

Mr. Maguire: Well, I thought you were interested in his previous condition, but if you are objecting, I will not proceed.

The Court: The objection is good, sustained.

Mr. Maguire: Very well, that will be all, Mrs. Lyons. Counsel may want to examine you.

### Cross-Examination

By Mr. Kriesien:

Q. Mrs. Lyons, do I understand your testimony to be that Mr. Lyons did not inform you of this chest and arm pains until after you had found the nitroglycerin tablets in his pocket?

A. That's right.

Q. And he advised you at that time, that he had been informed by the doctor to go on this fishing trip?

A. That's right.

Q. Do you know how many times he saw the

(Testimony of Jane S. Lyons.)

doctor with reference to this pain in the chest, radiating down the arm?

Mr. Beebe: Well, just a minute, there hasn't been any testimony about radiating down the arm.

Q. (By Mr. Kriesien): Pain in the chest?

A. I am not sure on that. I believe, only the once, but he may have gone back a second time, and I just really don't [109] remember.

Q. And did Mr. Lyons take any of the nitroglycerin pills in your presence? A. No.

Q. Well, was Mr. Lyons one that would tell you about his complaints or did he rather keep things to himself along that line, Mrs. Lyons?

A. I would say he was more inclined to keep them to himself, but not to the extent of where I would—he would be what I would term foolish about it.

Q. Did he ever advise you in May of 1950 he had been to Dr. McKeown? A. No.

Q. Due to a condition of pain in his chest?

A. No.

Q. Did you ever have occasion to confer with Dr. McKeown about the condition of Mr. Lyons' health?

Mr. Maguire: Let me—you mean prior to his death?

Mr. Kriesien: Prior to his death, yes.

A. He was our family physician and I had, of course, talked with him at the time of the accident, but not about any—I mean, that would be hard to say, being our family physician and whatever came

(Testimony of Jane S. Lyons.)

up we always consulted with him, but as to a given time, I couldn't tell you.

Q. In December of 1952, had Mr. Lyons been seeing Dr. McBride [110] quite regularly?

A. December of '52, I don't know.

Q. You wouldn't know. I will ask you whether or not Mr. Lyons, when he told you about the pain in the chest, also said that he had pain in his arms?

A. No.

Q. Do you know whether or not Mr. Lyons saw Dr. McBride quite regularly while he was in Coos Bay?

A. No. I mean, I know he didn't see him regularly.

Q. He did not. Mrs. Lyons, did you have occasion to be in the woods a considerable amount with Mr. Lyons when he was going about his work, or did you more or less tend to the house?

A. I more or less tended to the house. I went in the woods often, but I was in the car. We would drive up to the camp and that sort of thing, but not during the time he would be working in the woods.

Mr. Kriesien: That's all, Mrs. Lyons.

Mr. Maguire: That's all.

The Court: You may be excused. Next witness.

(Witness excused.)

Mr. Maguire: Recall Dr. Chamberlain. [111]

## DR. FRANCIS CHAMBERLAIN

recalled as a witness on behalf of the plaintiff, having been previously duly sworn, testified further as follows:

## Direct Examination

By Mr. Maguire:

Q. Doctor, you are a duly admitted physician and surgeon in the State of California?

A. Yes, sir.

Q. Where did you receive your medical training?

A. I received my M.D. from the University of California Medical School in 1934, and do you want any more medical training?

Q. Yes, if you will.

A. I interned at Stanford University Hospital. I went back to the University of California Hospital for a year of assistant residence. I then went to Columbia University training as physician and surgeon in New York, where I had two years training as resident in cardiology in residence in medicine, and where I received the degree of doctor of medical science from Columbia University. Then I went to Boston to General Hospital to work with Dr. Paul White for two years, first as resident in cardiology and then as resident fellow in cardiology in Harvard Medical School. At the same time, I helped Dr. Paul White with his work.

Q. The Dr. Paul White, the physician who took care of [112] President Eisenhower?

A. Yes, sir.



(Testimony of Dr. Francis Chamberlain.)

Q. And—you may continue.

A. Then I returned to the University of California Medical School where I was put in charge of the Department of Cardiology and the Electrocardiograph Department in which position I continued for seven years, after which I withdrew from full-time work at the medical school to take up an office where my practice was restricted to consultation in cardiology in the afternoons and I continued to teach five mornings a week, alternate semesters as a professor at University of California Medical School, and in which role, I also give lectures, I give most of the lectures in the medical school on the subject of coronary heart disease and hypertensive heart disease.

Q. And are you still associated with the medical school?

A. Yes, sir, I am an associate clinical professor of medicine.

Q. And your professional life, outside of that, is in San Francisco, now?      A. Yes, sir.

Q. And do you do any other kind of medical work, other than your private practice, other than in these relating to the heart and circulation?

A. No, sir, my work is entirely restricted to the heart. [113]

Q. Have you received any certification in any specialties from any of the American boards?

A. Yes, I have been certified as a specialist in internal medicine by the American board, and I

(Testimony of Dr. Francis Chamberlain.)

have also been certified as a specialist in the cardio-vascular disease by American board.

Q. Have you occupied any official positions in any of the medical associations or branches of the medical associations?

A. Yes, I have been president on three different occasions of the San Francisco Heart Association. I was president of the California Heart Association. I am on the board of directors of the American Heart Association, on the editorial board of the American Heart Journal, and I am one of a five-man national committee in charge of certification for cardio-vascular disease. A five-year term, five-man committee who has sole charge of the certification of men throughout the country in certification in the cardio-vascular disease.

Q. Well, does that board determine, before one may receive a certificate, does he go through a number of examinations and examinations of his record and what he knows about it or what experience he has had in cardio-vascular disease?

A. Yes, they have to show qualifications by having several years training under proper authorities. Then they have to pass a written examination, and then they have an oral examination which we supervise, which, incidentally, I have [114] to spend a day next week doing in Chicago.

Q. I see. I take it that in your studies and in your practice, you have had occasion to both know of the physical constitution of the heart which is free from any abnormality whatsoever, as well as

(Testimony of Dr. Francis Chamberlain.)

hearts which have been—have conditions which are not as good as that of the perfect heart?

A. Yes, sir. Most of the patients actually who come to a heart specialist have no heart disease, but have various manifestations that might make them think they have, so that actually, the majority of the patients we see, as new patients, who come for heart study don't have any heart disease.

Q. Well, what do you mean by that? Is it a psychopathic or mental condition or do they have some discomfort in the vicinity of the heart or chest?

A. Well, they have symptoms which make them feel that they have heart disease.

Q. What kind of symptoms are those generally? I don't want you to go——

A. You mean symptoms which make them think they have heart disease, but which are not concerned in heart disease?

Q. Yes, sir.

A. Awareness of the beating of the heart, irregularity of the pulse, and especially pain in the chest very often radiating down the arms, which come on as a pattern of fatigue. In other words, many of the people we see, when they get [115] tired, they have a chest ache that is commonly thought of as part of fatigue, and the person will get an ache, and they think that it is heart trouble and so they get a chest ache.

Q. Well, Doctor, will you explain to me why a person will have a pain in the chest or in the heart

(Testimony of Dr. Francis Chamberlain.)

or what he thinks is in the heart when it is merely a matter of fatigue, and when he—by the way, you use the term “fatigue,” does that include both mental and physical fatigue?

A. Yes. It would include mental and physical fatigue. Well, the exact mechanism whereby fatigue is transmitted to sensations of pain, is one we don't know all the answers about, but we see, every day, examples of this pain. If I were to take your arm, and say for you to hold it out this way for five minutes, you have a great deal of pain and aching in your arm and will have exactly what will be the symptom of fatigue pain, and in some similar way, these individuals that we see, when they get tired, develop those pains, especially in their chest and their arms. Many themes have been written where some liken it to the feeling—to the comparison of the old Chinese water torture, where a drop of water dropping on the skin would produce or get the skin so highly sensitive that each drop would make the prisoner feel as though he—as would produce great agony and the heart pumps against certain sensitive parts of the chest in a similar manner, and some feel that this thump, thump, thumping of the heart against [116] a sensitive part of the chest, by virtue of the fact that they are aware of it. That is rather crude, compared to the highly sensitive nature of the skin and can produce those sensations of pain, but, of course, a great part of our time is spent separating these symptoms, these symptoms from true heart disease as compared to



(Testimony of Dr. Francis Chamberlain.)

the symptoms of fatigue, and there are various manifestations of each, which separate them in a very satisfactory manner, because all the symptoms all differ. The symptoms, in other words, of fatigue differ from the symptoms of coronary pain very strikingly, which an expert, of which actually, second- or third-year medical students are taught to make the differentiation of.

Q. Well, before I go any further on this matter, it just occurs to me that I have omitted to have you tell us about the factual situation with respect to this fishing trip and what happened there at the time that Mr. Lyons came on his death. Had you known Mr. Lyons prior to this trip?

A. No, I had never met Mr. Lyons, nor had heard of him prior to the time this fishing trip was arranged.

Q. You did know Mr. Irwin, did you not?

A. I knew Mr. Irwin and had acted as his physician when he was in San Francisco. I was his guest.

Q. Now, the other members. The members of the party, besides yourself and Mr. Lyons, was Dr.—a doctor from Portland?

A. Dr. Homer P. Rush of Portland, yes, [117] sir.

Q. Do you know what his specialty is? Well, he can tell about himself, and where did you join the yacht and who went with you?

A. Dr. Rush and I met in San Francisco, and flew a commercial plane down to San Diego, where we were met by Mr. Irwin's pilot and plane and we



(Testimony of Dr. Francis Chamberlain.)

flew down to La Paz. Mr. Lyons and Dr. Rush and I flew in this plane to La Paz where Mr. Irwin was waiting with the boat.

Q. That's the——

A. The Jo Jay which we saw in the movie, yes.

Q. Now, where is La Paz, on the Southern California peninsula?

A. Yes, La Paz is in the bay of Lower California about 300 miles north of the southern tip of the peninsula on the bay side.

Q. And did anything of moment happen in coming down, or as you were flying to La Paz—did anything happen that would be important to the Court?

A. No, we flew at about 7,000 feet elevation. It was a very pleasant, beautiful trip. There was nothing startling.

Q. Did Mr. Lyons give any indication of distress? Cyanosis or being out of breath when you were up in an elevation that high?

A. Not at all.

Q. About what was his general physical appearance? You might describe him and his physical description to the Court? [118]

A. Yes, he appeared quite healthy and he was obviously an energetic and attractive person who appeared certainly in excellent health, and who, I might say, on the entire trip never mentioned to me anything about his state of health. It was interesting to me that he and I were thrown together actually more than the doctor, because other members of the party—Dr. Rush and Mr. Irwin played gin rummy, which I do not play, and he and I talked

(Testimony of Dr. Francis Chamberlain.)

a good deal during that time and he informed me that his father had come down from Coos Bay to have me study him as a patient for a heart condition some four or five years ago, which I hadn't been able to recall.

Q. Now, I beg your pardon?

A. I was going to say generally, when there was some question of heart disease brought up, it seemed to me very unusual, the fact that I had—if he had known that he had heart disease, or if he had thought it——

Mr. Kriesien: If the Court please, I will object to this witness testifying or giving his opinion as to what another individual would have told him under the circumstances.

The Court: Objection sustained.

Q. (By Mr. Maguire): When you left La Paz, that's in the Gulf of California; is it not?

A. Yes, sir.

Q. Did you do any fishing on the way down toward San Juan [119] Del Cabo?

A. Yes, we—the first night of the trip we landed at La Paz, stayed on the boat, then the second day we went out toward the fishing grounds, fished and caught nothing. I think that's right, and it was the third day that we got into the better fishing country and the first fish that we caught on this trip, Dr. Rush caught. You saw on the movie, and then the second fish was this large marlin which we saw in the movie yesterday.

Q. Now, I believe you stated yesterday that Mr.

(Testimony of Dr. Francis Chamberlain.)

Lyons played that for some—I think you said 25 minutes, am I correct?

A. It was about a half hour.

Q. Did he have any assistance with the rod, anybody giving him assistance, or spelling him, or did he do all that himself?

A. No, he didn't. The fish was caught, the lines are left dragging with a sort of automatic device, and then when the marlin strikes the flying fish, which is used for bait, someone has to get the pole and take it from the deck of the boat over to the side of the ship and take the fishing rod and put it in this place in the center of the back of the boat and get himself rigged up in a chair in order to play it. And immediately, he said to Dr. Rush and me, you take this fish, and we said, no, we'd never seen a marlin caught, and we'd much prefer that he do it, so he played the fish for [120] about a half hour until finally it broke the line.

Q. When you play the fish—marlin fishing—I don't know about that, I am not an expert, what did Mr. Lyons do in playing the fish? Did that involve any physical exercise?

A. Yes, it involves a great deal of exercise and especially with a marlin like this, it was—they told us it was a very large marlin. In the first place, taking the rod with a big fish on the end of it from the side of the deck where it was fastened in a hole, and taking it across six feet or so to the center of the boat and get himself rigged up, meant a great deal of heavy strain, then the bottom of the pole

(Testimony of Dr. Francis Chamberlain.)

is rigged into the seat and then most of the pull is on the upper end of the fishing rod, but constantly the rod is pulled back in against the fish and then the reel is taken up and the load is so great that the man is strapped into this chair and this certainly is a strenuous physical tussle.

Q. Now, during that time, either during the time that he had that marlin in play or afterwards, did you—were you close, by the way?

A. Yes, I was right there all the time.

Q. Did he disclose any signs of distress, shortness of breath; that is signs of cyanosis?

A. Not at all.

Q. When he lost the fish, did he continue fishing or what happened then?

A. Yes, we continued to fish and it was getting sort of [121] late in the afternoon, and we had to come to our—well, let me see—he hooked this fish, I'd say about one or two o'clock in the afternoon the day before his death, and we fished around trying to get another strike and were unable to, then we had to proceed to get to our port, to San Jose Del Cabo, which is the town at the very southern tip of Lower California where we anchored for the night.

Q. At any time, from the time he hooked that fish, did he give any indication of any kind of distress?

A. None in the least.

Q. What was his physical and mental reaction to it?

A. It seemed to be quite natural in every way.

(Testimony of Dr. Francis Chamberlain.)

Q. Did you state whether or not he seemed despondent or depressed?

A. Not in the least no. His reactions were those of a vigorous, healthy, intelligent man having a vacation.

Q. I see. Now, that night, you say you anchored there right off San Lucas Del Cabo? A. Yes.

Q. And did the party go ashore; any of them when they got into port?

A. I don't think we went ashore. The port captain came, Senor Ruiz boarded the ship to get our papers and so on, and it was—he told us about the doves, and I think that Jim, who was probably the more interested huntsman of the crowd, [122] was always—for instance in the plane before, saying this is where we hunt ducks, and so on, and he obviously was interested in the hunting, but I don't know who started the conversation but I heard him and Senor Ruiz talking about dove hunting, but Dr. Rush and I took a small boat and went out with small rods for the local fish in the tail end of the afternoon and evening, but I don't think any of us went ashore until the next morning when it was time to go dove hunting.

Q. You had your dinner then and slept aboard the yacht? A. Yes.

Q. And during meal time, did Mr. Lyons eat excessively or what; did he drink excessively; just tell us what the situation was.

A. No; I don't think anyone ate excessively, or drank excessively as our host and cook was on a



(Testimony of Dr. Francis Chamberlain.)

salt-free diet, and he had this low-salt diet which none of the rest of us ate, three of us ate the ordinary salted food, and we had about the usual amount of drinking, that I think that four men would have on a trip, which meant cocktails before dinner. I don't recall anybody—I think I would have remembered if anyone had seemed drunk. I don't think anybody had more than the usual cocktail affair.

Q. There wasn't any drinking after dinner?

A. No; and I don't recall any drinking during the day on [123] any of the trip. I mean, before cocktail time in the afternoon. I am not sure about drinking after dinner, I don't recall. There might have been some but certainly there was no alcoholic orgy or I would have recalled it.

Q. I see, sir. Were you and Mr. Lyons together after dinner, to differentiate mixing around with Dr. Rush and Mr. Irwin, did they sit around the cabin and play?

A. They played gin rummy, and he and I talked a good deal.

Q. Who, you and Mr. Lyons?

A. Yes. Now, the last night before the accident, I don't recall talking to him as much as the night before that, but the night before that I think he and I must have spent four hours or so talking about a great deal about the problem of raising children and how not to let the wives spoil them.

Q. About what time did you retire that night?

A. Well, as I recall it, we went to bed early because we were getting up early to go dove hunting,

(Testimony of Dr. Francis Chamberlain.)

and I think we went—I should guess we went to bed around nine o'clock or so.

Q. At that time, did Mr. Lyons, during the evening, show—give any evidence or make any complaint of lack of ease or any condition other than of good health?

A. None at all. He seemed in excellent health.

Q. Now, the next morning, about what time did you arise?

A. The next morning I think we got up about five o'clock and [124] we had breakfast and Senor Ruiz was there in an automobile to take us dove hunting, as I remember, about six o'clock. It was fairly early.

Q. Did—in talking to Dr. Rush, he speaks of a Senor Ruiz?

A. That's it, R-u-i-z (spelling).

Q. They are one and the same person?

A. Yes, sir.

Q. Now, how did you get ashore?

A. We had a small boat which—we had our own small boat which had a little put-put on it which we took to shore. We were anchored perhaps some 400 feet from shore, as I recall.

Q. What kind was the automobile; large enough for the entire party to ride in?

A. It was a battered old car, held together by wire and so on. I think it was a Ford, and we all got in, Senor Ruiz had a son there about 11 or 12 years old along too. Our host, Howard Irwin, didn't go on this party, and I asked him why he didn't,

(Testimony of Dr. Francis Chamberlain.)

and he said he had a known heart condition and he thought that it might be strenuous, so he stayed on the yacht. So the rest of us, Dr. Rush and Jim Lyons and I—there were five of us in the car.

Q. Did the pilot go, Mr. Parrick?

A. Oh—and Mr. Parrick, the pilot.

Q. That's the airplane pilot, not the yacht [125] pilot?      A. Yes.

Q. I see. Well, about how far did you drive in that automobile to the place where the dove shooting was to take place?

A. The roads were sort of roundabout, we had to skirt a slough to get there and it seemed to me it was about five miles, something like that, that we went out.

Q. I see. And what was the nature of the country when you stopped?

A. Well, this country was desert country. There was sand and cactus and sagebrush and shemise (sic), and that sort of thing. And this area where we went dove hunting was mostly sand dunes sort of country, some flat and then hills, due to pretty good-size sand dunes on which there was some desert vegetation, so it was sort of semi-rough, sandy country.

Q. Now, were you there when the men who were hunting took their stations?      A. Yes; I was.

Q. You might just tell us what went on.

A. Well, there wasn't enough guns to go around. Mr. Lyons had his magnum shotgun, which I had never seen before, and which he showed me, and

(Testimony of Dr. Francis Chamberlain.)

showed me the magnum cartridges, and there was a .22 on the boat which Dr. Rush took and Senor Ruiz had a couple of old guns and one other .22 and one was a rifle and the other was a single barrel that looked like it might [126] fall apart, and which I think the airplane pilot took, but there weren't enough guns to go around, and I had my movie camera and didn't like to hunt doves very much and I stayed with Mr. Lyons. I was interested—he had been our host, had told me he was a great hunter and a very expert one, and I was interested in watching his technique to see how the experts did it, so I stayed with him for quite a while.

Q. Now, about how far from the road was it that he took his station, approximately?

A. Well, from where we left the car, we did quite a bit of walking, we actually—where his body was found—was not far. It was right close to the road. I think the movies show that it was ten feet or fifteen feet from the road, but we left the car, I should say a half mile away from where his body was and we walked around a good deal. There wasn't a dove in sight, and we walked around a great deal. We climbed some of the little sand dune hills around there and I stayed with him and Dr. Rush—I think he and Dr. Rush and I were together part of the time, due to—we were sort of restless and wondered if the Mexican really had guided us right, because he told us the sky would be black with doves and I didn't see a dove the whole time I was walking around with them.

(Testimony of Dr. Francis Chamberlain.)

Q. Well, now, did Mr. Lyons—in this walking that you are talking about, did he show any signs of shortness of breath or anything else which would be away from the normal good [127] health?

A. Not a bit. There wasn't anything that drew my attention to his behavior in any different manner from the way I did, and we climbed the sand dunes—the sand dunes, the one I recall I think was 80 to 100 feet high with rather difficult walking. It was loose sand and little cow trails around here and there when we walked around through the area, and certainly I don't recall—obviously I wasn't watching his breathing—because the question of his having heart disease hadn't entered my mind, but there was certainly nothing about his reactions that attracted my attention.

Q. And finally you came back to where he took his station to shoot, or were you there when he started to shoot?

A. No; we were still wondering around. Now, I think that's wrong. I think they did get their stations and I went along with them for a little while. He was hunting, as I remember, closest to town. Dr. Rush was the next one to him away from town and I think Bob Parrick, the pilot, was farther away from town, and I stayed with Jim a while, and no doves came along and the Mexican told us to just wait, pretty soon they will come, so I finally got discouraged and went to town to look for some local color to photograph.



(Testimony of Dr. Francis Chamberlain.)

Q. And when—you were then away from the place when the occurrence happened?

A. Yes; I walked to town, which the main part of town was [128] a little away from the place, you had to go around—skirt this slough to get to the town proper and I walked—I think perhaps two and a half or three miles into town.

Q. When did you first hear of the accident?

A. The Mexican came dashing in in his car and told me that Dr. Rush had been killed.

Q. Dr. Rush had been killed?

A. Yes; he got the names wrong. He said Dr. Rush had been killed and that his shotgun had gone up——

Mr. Kriesien: If the Court please, I object to this witness testifying as to what Mr. Ruiz told him. I move the answer be stricken.

The Court: It may go out.

Q. (By Mr. Maguire): You were informed of it by Senor Ruiz? A.. Yes.

Q. All right. And then what did you do?

A. I went right back with Mr. Ruiz to the body and it was then that I took my—I had my movie camera—I took this film that you saw and talked to Dr. Rush and we realized that there was nothing that we could do and then Mr. Ruiz took me in his car back to the yacht where I got a boat and told Mr.—our host, Mr. Irwin, what happened.

Q. Did he then come ashore?

A. Yes. We then came ashore together and went back to the body again. [129]

(Testimony of Dr. Francis Chamberlain.)

Q. And you went back in Senor Ruiz' car?

A. Yes.

Q. Now, at that time, do you know whether word had been given to any officers of the Government, officers medical or otherwise to come to the scene of the accident?

A. Yes. When I got there, Mr. Irwin immediately wanted to find out what we could do and send word back home. There were no telephones since we were in this rather primitive area, there was a telegraph line to La Paz, which was in not very good condition and they had great difficulty getting a message through to the police. They couldn't get through to La Paz at all, but they finally got a telegraph to San Jose Del Cabo, which was the place where the police and the doctors and hospitals were located, and this was about 50 miles north of Cape San Lucas.

Q. I thought I heard the word "San Jose," that's where the military and police post is?

A. Yes.

Q. When you returned to the scene of this catastrophe, what did you observe?

A. Well, at that time the question was about the ants and insects that were coming around, and I went back to town to pick up some material to put around it to try to get rid of the ants. We were told we must not touch the body any more, and that we must not disturb a thing until the police came. [130]

Q. At about what time was it that the police came?

(Testimony of Dr. Francis Chamberlain.)

A. The accident occurred at about nine in the morning and the police took about two to two and a half hours to get there, the police and the two doctors.

Q. Are those the two doctors who performed the autopsy?      A. Yes, sir.

Q. And you returned to the town of San Lucas with them or at the same time?

A. I stayed there and watched their inquest. I guess you call it, took movies of the whole thing which I mentioned in court, which they insisted be exposed to the sun and be destroyed, and finally, I wanted to be present when the autopsy was performed, I was the only member of our party that spoke any Spanish, so I went with the doctors and with the body to San Jose in the station wagon.

Q. Before we go into that further, the evening before, when Senor—the port captain, Senor Ruiz, came, was anything said about any permit for guns or any license for shooting?      A. Yes.

Mr. Kriesien: If the Court please, I think that is highly irrelevant to this proceeding, it would be merely hearsay.

The Court: Objection sustained. Whether or not they had a license is immaterial. They were actually hunting.

Mr. Maguire: Oh, there is no question about that, I [131] can bring it up again later.

Q. Now, you accompanied the two Mexican doctors and the body up to San Jose; is that correct?

A. Yes, sir.

(Testimony of Dr. Francis Chamberlain.)

Q. About what time did you reach San Jose?

A. It was a very bad road, mostly mountain trail and the distance was about fifty miles. I suppose it took us somewhere around three hours to get there.

Q. You arrived there about what hour in the afternoon or evening?

A. I think we must have arrived there about two o'clock in the afternoon, somewhere along in there.

Q. And did they have—was the body taken to the hospital there?

A. Yes, sir; the body was taken to the hospital and searched in my presence and left at their morgue.

Q. By the way, when it was searched, was there any nitroglycerin pills found?

A. No, sir. There were no nitroglycerin pills, there were no pills of any kind. I saw everything that was taken from his pockets.

Q. By the way, those two doctors I believe one was Rodriques and one was Serrano, where did they have—were they attached to the police or to the—what did they have as official positions [132]

A. They were working for the Government as physicians. It was some sort of a government setup.

Q. Doctor, about what were their ages?

A. About 30, perhaps 28 to 32, somewhere in there.

Q. Did you make a request to be present at the autopsy?

A. Yes, sir; I did.

(Testimony of Dr. Francis Chamberlain.)

Q. What answer was made?

A. The answer was that there was a good deal of red tape that had to be complied with, that the autopsy could not be performed immediately, and that they would let us know when it was to be performed.

Q. Did they let you know?

A. No, they didn't. We waited—I was in touch with Dr. Serrano several times. The other doctor could speak no English and my Spanish didn't do very well with him, so I talked to the head doctor, Dr. Serrano. I had a good deal of discussion with him, he showed me the hospital and their facilities and their morgue, and all the rest, but although we were available and stayed down at the precinct of the police most of the time, we were not informed about the autopsy.

Q. You therefore were not able to be present?

A. No, when we were rather anxious to be present.

Q. You say we were anxious?

A. Dr. Rush and I. [133]

Q. Did he accompany you?

A. No, I came on the station wagon, Dr. Rush came with Mr. Irwin by boat and they anchored off San Jose Del Cabo and they joined us later in the afternoon.

Q. And did you learn when, or about what hour the autopsy was performed?

A. Performed that evening around nine o'clock, we subsequently found.



(Testimony of Dr. Francis Chamberlain.)

Q. And did you make any subsequent inquiry to find out why you were not admitted or not permitted to be present or why you were not notified as to the time when——

Mr. Mize: Object to on the ground it is irrelevant and immaterial.

The Court: Overruled.

A. Yes, I expressed displeasure at not having been notified. I pointed out that we had expressly requested that we be permitted to be present at the autopsy.

Q. For what reason, if any, was given?

A. I don't recall. I don't recall what the excuse was. It was certainly clear that I kept pestering this fellow several times in the course of the day to find out when the autopsy would be, stating that we wanted to be there. There was no question about his understanding my request.

Q. Going back now, to what you observed when you returned from San Lucas to the spot where Mr. Lyons lay dead, what [134] did you observe with respect to his body; any evidence of any unusual conditions; wounds; cyanosis; or what? Just tell us in your own words, in detail about that.

A. I was impressed primarily by the fact that his face showed these lacerations and bloody patches.

Q. What about the powder burns?

A. I wasn't—I am not sure I'd know a powder burn when I saw one, but the face obviously was

(Testimony of Dr. Francis Chamberlain.)

lacerated and bloody so that my immediate feeling was, I thought that the shot had gone into his brain. Actually, my first looking at him, that was the only way in which he appeared different to me, from the ordinary man who was dead, and had been dead—he was probably dead a half hour before I got there.

Q. Did you participate in any examination of the ground to see whether or not, in the discharge of the gun, any of the ground had been disturbed?

A. Yes, I did, and of course the ground, the sand had been walked on around the body before I got there. I think that must have been in the course of Dr. Rush's attempts to apply artificial respiration and so on, but I observed so that the tracks meant very little from the walking around, but I observed the terrain, the type of bushes that were nearby. There was a shemise (sic) wood, some sort of a well-weathered log, you called it a log trunk on the ground a few feet from where he lay. I thought this, looking at it, was that [135] maybe he tripped over that log and fell.

Mr. Kriesien: If the court please, I move that that answer be stricken on the ground it is not responsive to the question and is not a field in which this witness is qualified to render an opinion.

The Court: Motion granted.

Q. (By Mr. Maguire): What was the name of that wood? A. Shemise (sic).

Q. Shemise (sic) wood, that was not a living tree, was it, or bush? A. No.

(Testimony of Dr. Francis Chamberlain.)

Q. Is it a bush or tree?

A. Well, I guess it's halfway between the vegetation there, the trees or brush, whatever it was, there was low brush a foot or two high. There is this other stuff, I call it shemise (sic), I am not sure of its identification, that was 12 or 15 feet high and there were occasional trees that were maybe 25 feet high.

Q. Did you make any examination to determine whether or not the discharge of the gun had torn any limbs or foliage off of any of the brush around there or trees?

A. I looked around a moderate amount to try to get some clues which I was unable to obtain. I was going to say that my feeling was that this log on the ground, that was important—

Mr. Kriesien: If the Court please, I object and I move [136] that answer be stricken, your Honor, as not responsive, and not within the realm of opinion testimony.

The Court: It may go out.

Q. (By Mr. Maguire): Don't speak about your feelings. What, as to whether or not you made an examination of the ground to determine whether the shotgun had been fired close to the ground or into the ground or any indication it had been fired into or hit—the charge had hit this brush or tree or anything like that?

Mr. Kriesien: If the Court please, he has already testified that the ground had been walked

(Testimony of Dr. Francis Chamberlain.)

upon. This was a half hour after the discovery was made.

Mr. Maguire: We will not argue about it.

The Court: The question is withdrawn.

Q. (By Mr. Maguire): Now, did you note any shotgun shells either on the ground in the immediate vicinity where Mr. Lyons' body lay or any live shotgun shells which you have described Mr. Lyons telling you were magnum shells—about how many shells were there for the gun that you noticed? A. I don't recall.

Q. Was there more than one or did you see any?

A. I don't recall.

Q. Now, you have——

A. This was after the accident, I paid a lot of attention to the shells before the accident, and examined them carefully. [137] After the accident, I recall that the police had the four doves and they had some shotgun shells—the cases that they had, and I don't know whether those had been gathered up before or afterward. I didn't notice.

Q. I see. Now, did Mr. Lyons—he had shown you what you call the magnum shells the evening before. Are you familiar with the ordinary shotgun shell as compared to the shell you saw that night?

A. Yes, sir.

Q. Will you describe the difference?

A. The magnum shells were considerably longer was the main difference. I had never seen the magnum shells before, they were the longest shotgun shells I had ever seen.

(Testimony of Dr. Francis Chamberlain.)

Mr. Maguire: Your Honor, before we go into the medical testimony itself, I want to get all of the testimony, we have Dr. Rush here to supplement some of the things that Dr. Chamberlain has testified to, and because it was necessary to get all the facts and thing, may he be withdrawn?

The Court: Any objection?

Mr. Kriesien: No objection.

The Court: He may be withdrawn temporarily.

Mr. Maguire: Shall I call a witness or Dr. Rush, or would your Honor like to have a recess?

The Court: There will be a short recess.

(Witness excused.)

(Whereupon, a short recess was had.) [138]

The Court: Proceed.

Mr. Beebe: Call Dr. Homer Rush, if the Court please.

DR. HOMER P. RUSH

was thereupon produced as a witness on behalf of the plaintiff herein and, having been first duly sworn, was examined and testified as follows:

The Court: I will say for the record, gentlemen, that I have been favored with a copy or I assume maybe the original of Dr. Rush's deposition, which I have read with considerable care. Now, there was some discussion made the other day that the doctor wanted to make certain corrections in his deposition, certain language corrections, and from my



(Testimony of Dr. Homer P. Rush.)

observation of the deposition, it has not been corrected, although he did sign it.

Mr. Beebe: That's correct, your Honor, he was advised that if anything came up from the use of the deposition which he wanted to correct that it would be taken care of at this time, and I therefore instructed him to sign it and return it under those instructions from the Court.

The Court: Very well.

### Direct Examination

By Mr. Beebe:

Q. Your name is Dr. Homer P. Rush; is that correct?      A. Yes, sir.

Q. Are you a duly licensed and practicing physician and [139] surgeon in the State of Oregon?

A. Yes.

Q. Doctor, I want to go into your qualifications. Would you advise the Court of your medical background?

A. I graduated from high school in Nebraska, went to the University of Nebraska for two and a half years previous to World War I, and I left for the Army. Came out to Oregon in 1917, entered the University of Oregon Medical School at that time, got my M.D. from the University of Oregon Medical School. Was granted my A.B. by the University of Oregon with my previous work at Nebraska. I took my master degree at the University of Oregon. Went

(Testimony of Dr. Homer P. Rush.)

back to the University of Chicago in physiology, took post graduate work with Dr. Carlsen in the Department of Physiology at the University of Chicago. That was after I received my M.D., which was in 1921. I then taught physiology full time for a period of approximately five years. Went over to the Department of Medicine; worked under Dr. T. Homer Coffman, who at that time, was Professor of Medicine at the University of Oregon Medical School and later went to the University of Vienna, came back from the University of Vienna about 1928. Have been connected with the University of Oregon Medical School since that time, and at the present time my rank is Clinical Professor of Medicine, or Professor of Clinical Medicine. [140]

Q. Doctor, are you certified as a specialist by any of the American boards?

A. I am, by the American Board of Internal Medicine and sub-speciality in cardiology.

Q. How about your practice, Doctor, is your practice limited?

A. It is limited to internal medicine.

Q. How about your practice with respect to cardio-vascular disease?

A. I presume about 70 per cent is that type of practice.

Q. And the balance would be other problems?

A. Problems in internal medicine and diagnosis.

Q. Now, Doctor, with respect to the cardiology,

(Testimony of Dr. Homer P. Rush.)

have you written any textbooks in that field or articles?

A. I have written some articles in that field.

Q. And the articles, were they published?

A. I have had articles published in the *Annals of Internal Medicine*, *Northwest Medical Association*, *American Medical Association*; *Journal of Endocrinology*, *American Heart*.

Q. Have you finished?

A. Well, there were others but I haven't got any list. I could furnish a list of publications.

Q. That's all you can think of right now?

A. Correct, sir.

Q. Doctor Rush, were you acquainted with James Lyons in his lifetime before the trip on which he died? [141]

A. No, I was not.

Q. Whose guest were you on that trip?

A. Mr. Howard Irwin.

Q. Was Mr. Irwin a patient of yours?

A. Mr. Irwin was a patient of mine.

Q. Where did you first meet James Lyons?

A. I believe it was in Los Angeles.

Q. This was on the occasion of the trip where Mr. Lyons finally died; is that correct?

A. That is correct. I flew down to San Francisco and met Dr. Chamberlain, and we flew to Los Angeles and met Mr. Lyons in Los Angeles.

Q. How many days before his death was it you first met Mr. Lyons?

A. I believe it was on a Saturday. It would be,

(Testimony of Dr. Homer P. Rush.)

I think, February the 8, 1953, but I am not positive of that date.

Q. The 10th was the date of his death; is that correct, Doctor?      A. Yes, I believe it is.

Q. When you met Mr. Lyons in Los Angeles, what did you then do?

A. We boarded the plane which Mr. Lyons and Mr. Irwin had and flew on down to La Paz, Mexico.

Q. And you were flying in company with Mr. Lyons on the way down? [142]

A. That is correct.

Q. Now, what did you observe of Mr. Lyons with respect to his general physical characteristics?

A. I thought Mr. Lyons was a very vigorous, husky businessman. I rather had the impression that he felt in pretty good physical status, he loaded a lot of supplies into the plane. It seemed to me that he was doing much more work than the pilot with regard to shifting things around, and I saw nothing that would lead me to believe that he was anything other than a very healthy man of mid-forties, I would have guessed him to be.

Q. Now, during the flight southward into Mexico, did you have occasion to observe Mr. Lyons in the airplane?      A. I did.

Q. Did he show any signs of shortness of breath or illness of any kind at the altitude at which you were flying?

A. He showed no signs of any illness of any kind that I know of.

(Testimony of Dr. Homer P. Rush.)

Q. How did his mental status seem to be during that trip?      A. Excellent.

Q. Was he in good spirits?      A. Excellent.

Q. Now, after you arrived at the end of the flight, what did you then do?

A. We were met down there by Mr. Irwin and some of his men [143] and proceeded to go over to where the yacht was, it was not docked, because it was away from the dock a little ways, loaded our luggage onto a small boat and went out to the yacht. Moved it onto the yacht, got ready to set sail, so that we could get down to the fishing ground as soon as possible.

Q. What time of day was it that you arrived at La Paz?

A. I would think late afternoon, but I really don't recall exactly.

Q. Was it still daylight?      A. Yes, it was.

Q. You say that you moved your luggage and gear off so that it could be placed on the yacht?

A. That's right.

Q. Did Mr. Lyons do any of that work?

A. He did.

Q. What was the nature of the articles that he carried and lifted and moved?

A. I don't know as I can answer that question truthfully. The ordinary supplies. I didn't pay much attention to them. I know some of them were boxes that I imagined to be canned goods or something of that type, but I am not certain.



(Testimony of Dr. Homer P. Rush.)

Q. Now, did you observe any symptoms of fatigue or shortness of breath or anything?

A. I did not. [144]

Q. What would be an indication of ill health at that time?      A. I did not.

Q. Then did you go onto the boat itself, onto the yacht?

A. We did. We had a distance of—oh—maybe a half or three-quarters of a mile that we were driven up the dock, then took a boat and went out to the yacht.

Q. What did you do after you got on board?

A. We were assigned to cabins and I think I tried to unload my gear and clothes and sort of get it arranged. In the meantime Mr. Irwin had two Mexican boys that were sort of crew men and he stored away part of the supplies that were brought aboard and pulled up anchor and started on our way.

Q. Started out for the fishing ground?

A. That's right.

Q. Did you have your dinner on board the ship that night?      A. We did.

Q. Now, at any time during that day, had there been any drinking or——

A. There hadn't been any drinking until after we got aboard the yacht. I mean, I think, we had cocktails before dinner that night, although I don't know—I don't think there had been any unusual drinking. I am not even sure that we had cocktails that night.

(Testimony of Dr. Homer P. Rush.)

Q. And did you all have dinner together?

A. We did. [145]

Q. Do you recall what Mr. Lyons ate?

A. I do not. He ate the same things the rest of us did.

Q. Was it a large meal or a very heavy meal?

A. I would say an ordinary dinner.

Q. After you had eaten or during the time you had eaten, did Mr. Lyons show any signs of any digestive disturbance at all? A. He did not.

Q. At any time while you were with him, did he show any signs of digestive disturbances at all?

A. He did not.

Q. Anything to indicate—that would show gall bladder trouble?

A. He showed no signs of anything that I would have noted that would show any type of ill health.

Q. Now, after you arrived at the fishing grounds did you sleep on the boat overnight or on the ship overnight? A. We did.

Q. Then what did you do the next morning?

A. We didn't arrive at the fishing grounds that first night. We got the boat underway and went part way down and anchored and slept for the night and started out again the next morning. The second night we got down to San Lucas.

Q. I see. And when you arrived at San Lucas, that was where the fishing grounds were; is that correct? [146]

(Testimony of Dr. Homer P. Rush.)

A. Between—well, not far from San Lucas, I'd say possibly a little ways north of San Lucas.

Q. And then the next morning was when you went fishing; is that correct?

A. No, it wasn't quite that soon. I would think it was probably the early part of the afternoon when we began to see evidence of marlin and other ships that were fishing for marlin. At least that is what I was told it was.

Q. Well, on the occasion when Mr. Lyons hooked the marlin; when was that?

A. I believe that was the previous afternoon. I mean previous to the day of the accident.

Q. Yes. Now, how long had you been fishing on the afternoon he caught the marlin, before he hooked it?

A. Oh, I presume maybe two hours, I don't recall the exact time element.

Q. During that period of time before you hooked the marlin, had he caught any fish?

A. Not to my knowledge.

Q. Had you caught any?

A. I don't recall whether he caught any before or after that. We did catch some small fish, but I don't recall just the time element in regard to when this marlin was hooked.

Q. And while you were on this fishing trip, how did Mr. Lyons strike you as to his condition? [147]

A. Again, as I stated, I thought his condition was excellent. He seemed to me to be a very vigorous middle-aged businessman, I had the impression,

(Testimony of Dr. Homer P. Rush.)

that probably gave of himself quite a good deal; he seemed to be physically fit.

Q. At any time, did you hear him make any complaint about his physical condition?

A. I did not.

Q. Now, Doctor, will you tell the Court about the occasion when Mr. Lyons hooked the marlin?

A. Well, of course, in fishing for marlin, they have these rods out, and they are put in gear, nobody holds the rod, they're rigged, and on this particular yacht, we had four lines out and when a marlin takes the lure, then somebody takes the rod and at this time the marlin was hooked and Mr. Lyons took the rod. They do have a rig that is strapped around the body with a sort of a leather-like harness with a place in which the rod can be placed against the body to give some support on holding it. Usually they sit in a chair that is a swivel chair in the back part of the yacht, so that there is some give back and forth. They are not standing all the time, and when Mr. Lyons took this rod, he had no harness on. I imagine it was probably a few moments before the harness was put on him, which it was by the Mexican boy, and during that time he was doing it all with his arms and associated movements with his body, and, of course, he [148] placed the rod in the harness and sat down. The marlin seemed to be a very good-size one, so I was told, that was the first one I ever saw. It did break water several times. I have several still pictures which I took where the marlin is clear out

(Testimony of Dr. Homer P. Rush.)

of the water, and he must have played this fish for a period of around thirty minutes or so before the fish broke the line.

Q. Now, Dr. Rush, in talking about playing the fish, just to get it on the record, what does the fisherman do?

A. The fisherman has to take the rod——

Q. Holding it with two hands?

A. Usually, yes, and he has one of them that controls the reel to try to reel in and the rest of it is in the harness on his body, near the pole, so that it's back and forth, and you reel in and the fish will run, and if you "quash" it, as they call it, he will break a line, so you let the fish run out and then you reel it back in again and I would assume it to be quite hard work.

Q. Did it appear to be hard work to you?

A. It appeared to be hard work to me.

Q. And would you say that there was considerable effort involved over a period of time in playing such a large fish, particularly for 30 minutes?

A. I would think there was a reasonable amount of effort. Mr. Irwin, who was known to have heart trouble did not play [149] it himself, because he felt it was too much work.

Mr. Kriesien: If the Court please, I object to this witness testifying for Mr. Irwin.

The Court: That matter of the fact that Mr. Irwin did not play the fish may stay in the record.

Q. (By Mr. Beebe): Now, Dr. Rush, in order to shorten things down, on the morning of Mr.



(Testimony of Dr. Homer P. Rush.)

Lyons death, the day you went dove hunting, will you describe how you got out to the hunting ground?

A. We got up rather early that morning, I would assume some place between 5:00 and 6:00 o'clock, to my memory, I think we were to meet Senor Ruiz, as I have called him, about 6:00. We got into the dory which had a little motor on it, were taken ashore and walked possibly the equivalent of a block in the sand up to the dock where the car of Senor Ruiz was parked. It was a rather old vintage car, it was held together with considerable wire, and we got into this—which would be the equivalent of an old Ford touring car, I would think, and drove up to the village of San Lucas. It was perhaps a half or three-quarters of a mile from where we landed, at which place we picked up Senor Ruiz' son, a lad of about eleven or twelve, and brought the guns that Senor Ruiz had and put these in the car and the lad also got in with us, and we drove, I would say, a distance of perhaps three to five miles along parallel to the bay to the [150] place where we parked his car and got out, and there were no doves flying, and it was probably about 7:00 o'clock when we got out there.

Q. Before you go further, getting back to the fishing incident, did you observe Mr. Lyons after he played that marlin for 30 minutes?

A. Yes, I was with him all the rest of the day, except for the time that Dr. Chamberlain and I took the dory out and went for small fish in the bay.

(Testimony of Dr. Homer P. Rush.)

Q. What was his condition after the 30 minutes of exertion?

A. I thought it was very good. I might add this, that we did have another period of time when there were a lot of fish ducks flying around, and guns were gotten out, and Jim used guns in target practice at these and he certainly was steady. He seemed to know his guns. Which had occurred after his playing with the marlin.

Q. In other words, he shot some fish ducks from the boat?

A. That's right.

Q. And immediately after he lost the fish, did you observe him; were there any symptoms of distress at all?

A. None at all.

Q. Now, then, returning to the dove hunting expedition, after you got out to the place where you were stopped, what did you do then with respect to Mr. Lyons?

A. We got out of the car and divided guns, so to speak, [151] and there being no doves we walked around. I think that Bob Parrick and I and Dr. Chamberlain and Mr. Lyons took two or three little hikes around the country. I can remember one of them where Mr. Lyons and Dr. Chamberlain and I went up a little trail over a sort of a sand dune hill, and I can remember one remark he made was, "It's so nice to be alive on such a beautiful morning," and he seemed to be in excellent health, at that time.

Q. How about his spirits?

A. Excellent.

Q. Now, approximately how far would you say

(Testimony of Dr. Homer P. Rush.)

that you walked on these little excursions while you were waiting for the doves to come over, Dr. Rush?

A. Oh, I would approximate a total distance of at least a half mile or so, because they were small excursions, the equivalent of two to three hundred yards, maybe a little further, some of them.

Q. Now, did you observe the shotgun that Mr. Lyons was using that morning? A. I did.

Q. Did you see any of the shells that he had in his possession? A. I did.

Q. Are you familiar with shotgun shells?

A. I am a little.

Q. That is, do you own a shotgun yourself?

A. I do. [152]

Q. And what gauge is it? A. 12 gauge.

Q. Is it a magnum?

A. No, it is not. It is a Winchester.

Q. And did you make any observation as to the type of shells he was using, whether they were larger than usual?

A. Yes, they were much larger than the ones I used, because I remarked about it and looked at one of them. I had never used a magnum shell, myself.

Q. Approximately—well, will you state for the Court, Dr. Rush, coming down now to the time that you took your positions for shooting?

A. Along about 7:30, the doves began to come over, as the Mexican had told us they would, and I was standing by Mr. Lyons and he shot about at least two or three doves, and when doves would

(Testimony of Dr. Homer P. Rush.)

come over he would shoot a dove and a dove would fall. I mean I saw him shoot, it was on the wing, of course.

Q. Let me ask you a question there, at the point where he shot those two doves, Dr. Rush, was that approximately at the place where he was later, where he died?

A. I believe it would be within 30 yards of where he shot those two doves, Dr. Rush, was that approximately at the place where he was later, where he died?

A. I believe it would be within 30 yards of where he was later.

Q. Now, after he had shot those two doves, how long a period of time was it that had transpired, I mean the time taken [153] in shooting the two doves while you were with him?

A. The doves were coming over quite good at that time, and I would feel that there was less than a minute between the time that one would come over and he would shoot, and then another would come over and he would shoot. I would not say it was two, it might have been two, it might have been four. I don't recall. In the meantime, I was taken away by Senor Ruiz and suggested that I go up the road a little bit and off the road a little bit near where there was a fairly large tree that doves tended to land in, and I said with my .22 rifle I might get a chance to shoot at a dove that landed in the tree, so I was about—I imagine—purely guess work, I think I could pace it out on a road, but I imagine—

(Testimony of Dr. Homer P. Rush.)

I never measured it as to what that distance was, but I would guess some place around 60 or 80 feet, maybe further, I don't recall just exactly.

Q. 60 or 80 feet from where Mr. Lyons was?

A. Yes.

Q. Or do you mean——

A. I don't know whether it was yards or feet. As I say, I don't know what the distance was. As I stated in my deposition, I don't——

Mr. Kriesien: If the Court please, I move that the answer be stricken with respect to the distance that he might have been from the deceased. [154]

The Court: Well, see if we can't get it, can you give us your best estimate, Doctor, either in feet or yards how far away you were?

The Witness: I would feel I was about half the distance to the corner of that building across the street; how far would that be?

Mr. Beebe: Are you referring to the Congress Hotel building?

The Witness: Yes, I presume it to be closer to 60 yards than to 60 feet.

Q. (By Mr. Beebe): Now, Dr. Rush, will you tell the Court in your own words after you took your station, just exactly what you heard and observed from that point forward?

A. Well, from that point forward I had my back to Mr. Lyons.

Q. Let me ask you this, if you had looked for him, could you have seen him?



(Testimony of Dr. Homer P. Rush.)

A. I could not, because the brush—it was in the country.

Q. Now, go ahead.

A. I had my back in that direction and the doves, as I say, were coming over quite rapidly. I heard the shotgun explode from the position where he was and saw a dove fall, and I thought I heard a second one some minute or two later, and saw a dove fall, but there is one sequence that was different than any of the others, and that was the time that I heard the shotgun explode and saw the dove fall and the second [155] shot that came on much sooner than the other shots that had been fired, but—and saw no dove fall—then I would look back in that direction and when I did I would see a dove fall.

Q. You had seen a dove fall on every other occasion?

A. I had. My reaction, at that time, I mean it went through my mental processes that Jim was not letting me have a chance to get a dove, to allow a dove to land in the tree and give me a chance to shoot, and I was getting ready to holler at him when I heard a stertorous type of breathing.

Q. Doctor, can you find some other words to describe what you mean by stertorous type of breathing?

A. Sort of like a snore type of breathing, a snarling bull was the impression I had from the noise that I'd expect a bull to make when it was snorting around, and I wondered what that was at

(Testimony of Dr. Homer P. Rush.)

the time, and it was coming from the direction where Mr. Lyons was, and my reaction was that it was probably a wild animal of some type, and we had seen cows on the trail, and I wondered about a mad bull or dog or something and went to the road and went down that way. I don't know how long it took me to walk it, it didn't seem but a few seconds to me. I think I estimate it around 10 or 15 seconds. It certainly isn't—wasn't much more than that—I probably—I trotted down the road, wondering what I would do if it were a bull and looked to see how close the nearest tree was, [156] then I saw Jim lying on the ground on his face under a mesquite bush.

Q. Just a moment, Dr. Rush, now on the question of time, can you estimate how long it was before the second shot—that is to say the one immediately before you heard the breathing; how long was it between the time you heard the shot and the time you heard the stertorous breathing?

A. About enough time for me to think, why don't he let some of the doves land in that tree so that I could get a shot at some, so I would say it was just a few seconds. I don't know how I can estimate it in numbers or seconds because at the time, of course, this all happened so fast, I didn't even think of those things.

Q. You couldn't estimate?

A. I wouldn't think it would be over three or four seconds.

(Testimony of Dr. Homer P. Rush.)

Q. Now, then, when you arrived and you say that Mr. Lyons was under a mesquite bush?

A. That's right.

Q. Do you mean by that that there were branches hanging over him?

A. Over him, that's right.

Q. In what position was he in?

A. He was laying face down on his shotgun. The shotgun was going out over the left shoulder at approximately—it must have been a foot—eight inches—something like that— [157] and that's the muzzle of the gun and the other part of the gun he was lying on with his chest, and it came out on the right side about the angle of his hip, I imagine, with the stock.

Q. Now, do I understand, Doctor, that the muzzle of the gun protruded upward diagonally from a point just below his left shoulder about a foot?

A. Yes, sir.

Q. And the butt of the gun protruding at an angle from a point past his right hip; is that correct?

A. That's right.

Q. Now, was Mr. Lyons, was his whole body under the mesquite bush?

A. No, sir, I wouldn't think so, I would think maybe half of it or so.

Q. It would be the upper or lower?

A. It would be—was the upper half, the head and chest and thorax would be under the mesquite bush, and I think probably the buttocks and lower leg extremities were out.

(Testimony of Dr. Homer P. Rush.)

Q. Now, Dr. Rush, will you tell the Court what you did then and what you observed from that point until Mr. Lyons was dead?

A. I saw—when I saw this—the first thing I noted was blood coming from the right side of his face and I thought he had an accident and shot himself, and I hollered help, [158] and Senor Ruiz had gone over one of these sand dunes to pick up a dove, and Bob Parrick and the Mexican boy had gone up the road a ways to shoot doves. Senor Ruiz reached me first and I would feel it was in a matter of not more than another minute or so, maybe less than that; Bob Parrick and the Mexican boy were there another minute or so later, and we rolled Mr. Lyons over to try to get him in a more comfortable position for breathing, so that we were sure that he did not have sand in his nose and mouth, and had him a little bit toward the right side as we rolled him over.

Q. Doctor, when you rolled him over, did you roll him outward from the bush?

A. We rolled him outward from the bush.

Q. Thank you, proceed.

A. And Bob Parrick had some experience, I believe, in first aid. He had helped me in trying to do artificial respiration——

Mr. Kriesien: Pardon me a moment, could you speak a little louder? I am having extreme difficulty in hearing through the noise outside.

The Witness: I am sorry. Bob Parrick and I attempted artificial respiration. He was pulseless at



(Testimony of Dr. Homer P. Rush.)

this time, but had definite stertorous type of breathing with a good deal of noise in it, and after a matter of a minute or two or three, I don't recall just how long, he began to show evidence of pulmonary edema. I mean by that, frothy sputum began [159] to come out of his mouth and nose in his breathing, which gradually became blood tinged. I attempted to listen to his heart with my bare ear, but I couldn't because of the noise of the breathing. I put my hand on his chest and felt a tremulous type of activity going on, and, as I state, he was pulseless, I could get no pulse of any type. I could not even find any pulsation in the carotid vessels in the neck. I never felt more helpless in my life. I thought about some things we had on the ship, that we might use, but they were five miles from where we were, and in approximately five or six or seven minutes, something like that, he was gone.

Q. This tremulous thing that you felt when you placed your hand upon his chest, was that a heart beat; a fast heart beat?

A. I couldn't answer that question, whether it would have been, I thought it was heart action, but there was so much gurgling of this frothy fluid that was beginning to gather in the bronchus, that part of it could have been that type of vibration and I felt it in the chest wall.

Q. Now, Doctor, can you describe that sensation by likening it to anything that any of us might have felt?



(Testimony of Dr. Homer P. Rush.)

A. I likened it, when I gave the deposition, to the purring of a cat.

Q. Were you able to detect any rhythmic heart beat?      A. I was not. [160]

Q. Now, when you concluded that he was dead, was that when the breathing stopped?

A. That was right. It was after we tried artificial respiration for a little while and it didn't get any result from the artificial breathing.

Q. Now, was there any cyanosis of Mr. Lyons' face when you first arrived there?

A. Definite cyanosis was present when I first saw him; he was reddish.

Q. Did that condition continue?

A. Continued, and gradually the red color began to disappear and it became more and more——

Q. Was Mr. Lyons conscious when you first——

A. He was not.

Q. Did you observe the wounds on Mr. Lyons' face?      A. Yes, I observed them.

Q. Will you describe them to the Court?

A. They were like sort of scratches and erosion of the skin, some bruising like appearance, I thought there was some blood that had dried on them. They didn't look like a scratch that might come from a brush scratch, or anything of that type, they looked more like what I would expect the explosion of a gun to give a wound, and I think I felt one pellet under the skin that I interpreted as being a shot from the bullet.

(Testimony of Dr. Homer P. Rush.)

Q. You felt at least some hard lump at one of these excoriations or lacerations? [161]

A. That's right. And this involved the face and neck and temple, as I recall.

Q. On which side? A. On the right.

Q. Did you observe anything which appeared to you to be powder burns?

A. I thought there were powder burns because there seemed to be some bluish markings which I understood powder burns make if they are deposited under the skin.

Q. Where was that?

A. On the right side of the face and neck. I don't recall specifically.

Q. Did you observe any injury on the ear on that side?

A. I don't recall any on the ear.

Q. The eyelid?

A. I don't recall anything on the eyelid.

Q. Now, then, after you concluded that Mr. Lyons had died, what did you then do with respect to making any investigation around the scene of the accident?

A. The car was parked up the road a ways from the village by an approximation of a quarter to half a mile, and Senor Ruiz and his son went up and got the car and were going into the village and down to the ship. Bob Parrick and I were going to stay there. Of course we were distinctly upset. Bob had been very, very fond of Mr. Lyons and the [162] first thing I tried to do was calm down Bob Par-

(Testimony of Dr. Homer P. Rush.)

rick, then we looked around the area. We had rolled him out from under this bush when he was in his terminal stages. I took the guns, the .22 that I had and the magnum that was lying there and laid them out a little way from him, making sure those chambers were empty and we looked over the brush around there and the ground around there and so forth to see if there was any evidence of an explosion of his gun going into the ground or going off horizontally into the wood or the brush or anything like that. There were no tracks around this mesquite brush or under it. We kept people away from that and that was kept empty until the police came. There were tracks that were around him when we rolled the body out, but there were no tracks on the other side of any moment, but there might have been a track or two around, but it wasn't tramped down, we purposely watched it.

Q. Did you find anything on the ground or in the area or along the branches or in the leaves of the bush indicating that there had been any blast?

A. We did not. We could not find anything that would indicate that.

Q. Now, then, what did you then do, Dr. Rush, after making that investigation?

A. We went along the edge of the road and walked back and forth to go and look and see how things were and we were [163] worried about the insects getting around. It was interesting that a car went by, it contained a Mexican couple and the Mexican lady could speak some English. Of course,

(Testimony of Dr. Homer P. Rush.)

the body was right close to the road so it could be seen, and——

Q. Can you speak up?

A. The body was right close to the road where it could be seen and she had informed us that in Mexico it was unlawful to move that body.

Mr. Kriesien: If the Court please, I object to this line of questioning on the ground of hearsay and move it be stricken from the record.

The Court: Motion granted.

Q. (By Mr. Beebe): Well, Dr. Rush, just wait till I ask you a question; what, if anything, did you then do with respect to Mr. Lyons' body and before the arrival of any official and why did you do anything?

A. We didn't do a thing before the arrival of the police from San Lucas, except to stand guard, so to speak. We stood guard from then on. Now, following this, we did several things.

Q. All right, after that, after the police arrived, what did you do?

A. We were, of course, in warm country, the sun was coming up, and it was getting hot. We tried to get mesquite brush there and build a little type of shelter over the body, and [164] as stated, the insects were beginning to accumulate. We went back finally to the ship, got oil, and make an oil ring around the body to keep the insects from getting into it and got a tarp, and put a tarp over it.

Q. Now, then, Dr. Rush, if you recall, what time was it when the officials finally arrived at the scene?



(Testimony of Dr. Homer P. Rush.)

A. My impression was that it was early in the afternoon. I thought—I remember they promised to be there around 10:30 and that they weren't and then at another hour, and they weren't, and it seems as though it was early in the afternoon when they got there. That is purely memory, I might be wrong.

Q. And then they came and started to investigate the scene?

A. There was an investigation, I imagine you could call it, held at the scene, in which these officials that came from San Jose looked the situation over, and that included the two doctors and apparently a magistrate, who, incidentally, is obviously very powerful, but he had two or three helpers with him, they went over the factors and these two doctors looked very carefully over things, I was with one of them when he did it, and made their notes and suggestions and the body was then lifted into a station wagon and taken to San Jose.

Q. Dr. Chamberlain accompanied——

A. Dr. Chamberlain accompanied that [165] group.

Q. Did you go along to San Jose?

A. I did, I went about an hour later.

Q. How did you get there?           A. By car.

Q. Were you present, Dr. Rush, when Dr. Chamberlain requested the Mexican doctors that you and he be permitted to be there at the autopsy?

A. I don't know that I was present at the time he made his first, but I was there later in the day



(Testimony of Dr. Homer P. Rush.)

and we went out to the hospital on two or three occasions to find out where they were going to hold the autopsy, and would they let us know and the like, and after each 30 or 40 minutes would go back again and try to find out again.

Q. And when you weren't going to the hospital to try to find out, what were you doing; did you remain with the police?

A. At this magistrate's office, or whatever his title was, I don't know.

Q. Did you ever get to attend the autopsy?

A. We did not.

Mr. Maguire: Your Honor, that is all we wish to inquire of this witness at this time. We want to go into the medical testimony at a later time. I suggest, if the Court please and has no objection, that we take our noon recess.

The Court: All right. Will it inconvenience you to come back at 1:30? [166]

Mr. Maguire: Not at all, your Honor.

The Court: All right, then, 1:30. Court is in recess.

(Whereupon, a recess was taken until 1:30 o'clock p.m. of the same day.) [167]

(Pursuant to recess, proceedings were resumed at 1:30 o'clock p.m., November 23, 1955.)

The Court: You may proceed, gentlemen.

Mr. Beebe: Call Dr. McKeown, if the Court please.

## DR. RAYMOND M. McKEOWN

was thereupon produced as a witness on behalf of the plaintiff herein and, having been first duly sworn, was examined and testified as follows:

The Court: Will you state your name, please?

The Witness: Dr. Raymond M. McKeown, Coos Bay, Oregon.

Mr. Kriesien: May the record indicate, I presume that Dr. Rush was temporarily withdrawn from the stand?

Mr. Beebe: We have taken the liberty because Dr. McKeown has to be back, to call Dr. McKeown a little out of order, because he flew up from Coos Bay and he has to go back.

The Court: How do you spell your name, Doctor?

The Witness: M-c-K-e-o-w-n (spelling).

## Direct Examination

By Mr. Beebe:

Q. Dr. McKeown, you are a duly licensed and practicing physician and surgeon in the State of Oregon? A. I am.

Q. Will you state for the Court, Doctor, your medical degrees and qualifications? [168]

A. I have a bachelor of arts from the University of Oregon in 1924. I have a M.D. degree from the University of Toronto and—Toronto, Canada, in 1929. I have six years of postgraduate work at Yale University in New Haven, Connecticut, from 1929 to 1936. In June of '36, I came to Coos Bay, Ore-

(Testimony of Dr. Raymond M. McKeown.)

gon, where I opened my office for general practice.

Q. Have you practiced there since that time, Doctor?      A. Yes, sir.

Q. Do you have a specialty?

A. Not one that I would practice, but I was a qualified surgeon, an obstetrician and gynecologist.

Q. Your practice in Coos Bay is a general practice?      A. A general practice, yes, sir.

Q. Dr. McKeown, did you know James Lyons during his lifetime?

A. I don't remember when I didn't know him. We were childhood playmates.

Q. And did you grow up together?

A. We grew up in Coos Bay together. We went to school together and played football together.

Q. Would you describe for the Court, Mr. Lyons' general physical characteristics and personality?

A. He was a rather small man, he was an extremely sturdy man physically and emotionally. He went into his things wholeheartedly and very vigorously, at no consideration of expense to his own health and well-being. [169]

Q. A hard-driving individual?

A. He was a very dynamic and very forceful individual.

Q. Now, Dr. McKeown, were you the family physician at Coos Bay for Mr. Lyons and his family for a period of years?      A. I was, yes, sir.

Q. Did you have occasion to examine Mr. Lyons on numerous occasions?

(Testimony of Dr. Raymond M. McKeown.)

A. I examined him repeatedly.

Q. Now, Dr. McKeown, did you ever conduct any heart examination of Mr. Lyons?

A. Several times, I did, yes.

Q. Are there any particular ones that stand out in your memory?

A. None, because they were all normal.

Q. Did you examine him for a rather large life insurance policy some time in the 1940's?

A. I did, yes, sir.

Q. Did you give a heart examination in connection with that?      A. Yes, sir, I did.

Q. At that time, did you give him exercise tolerance tests?

A. I gave him all the usual recommended tests used to find out heart disease and there were none.

Q. Specifically, Doctor, did you hear any heart murmur at that time?

A. There was no heart murmur at that time or at any time. [170]

Q. Did you listen both before and after exercise?      A. I did, yes.

Q. And could detect no murmur?

A. Heard no murmur.

Q. Now, Dr. McKeown, in 1950 there was an occasion, was there not, when Mr. Lyons consulted you about pain in his chest radiating down his arm that occurred on a dock?      A. There was.

Q. You recall that occasion?

A. Yes, I do, from memory. I believe he was walking across a deck of one of his boats and he

(Testimony of Dr. Raymond M. McKeown.)

experienced what he thought was a chest pain, as I recall, radiating down one of his arms, his right, I believe, and he became frightened and apprehensive, which he didn't become very often, and he came to see me shortly thereafter, and I subjected him to all the tests for heart disease, and they were all normal.

Q. Did you have an electrocardiogram taken or take one yourself?

A. I took one and it was read by Doctors Willis and Armstrong, Portland, and his return was normal electrocardiogram. I believe I had it typed out there, too.

Mr. Beebe: May we have this marked?

(Document was thereupon marked Plaintiff's Exhibit 17 for identification.)

Mr. Kriesien: I might say, this indicates 16. I believe [171] the chart was number 16, so far as my records are concerned.

Mr. Beebe: Yes, this should be 17, actually. We will offer in evidence, if the Court please, Plaintiff's Exhibit 17 for identification, which was heretofore shown to counsel and which is the cardio—electrocardiogram.

The Court: It will be received and marked.

(Document previously marked Plaintiff's Exhibit 17 for identification was thereupon received in evidence.)

Q. (By Mr. Beebe): Now, Dr. McKeown, when



(Testimony of Dr. Raymond M. McKeown.)

you examined Mr. Lyons on the occasion of the pain that he had while crossing the dock, was there a case history given you of being unable to hold the telephone?

A. He mentioned to me that the pain was such a nature that subsequently he could not even lift a telephone, and I went on then to tell him what I thought the cause of that was.

Q. Now, Doctor, at that time, did you give Mr. Lyons an exercise tolerance test and listen to his heart before and after the exercise?

A. Yes, sir, I did.

Q. And did you detect any heart murmur at that time?

A. No, sir, I did not.

Q. Either systolic or diastolic?

A. No murmur of any description.

Q. Now, what was your diagnosis of this chest pain which [172] took place at that time?

A. As I recall, intercostal neuralgia and anxiety tension state.

Q. Will you explain to the Court what you mean by intercostal neuritis?

A. Coming out of the spinal column and going around to the front of the body in between the ribs are nerves that are all the intercostal nerves. One can have in there, arthritis and other spinal conditions which produce pain and pressure on those nerves itself. Pain then radiates around to the front of the chest and the sides of the body and so on. It is frequently misinterpreted by patients in their his-

(Testimony of Dr. Raymond M. McKeown.)

tory, and it is actually pain from arthritis of the spine, which was true in this case.

Q. Now, after that occurrence, and—what do you mean by anxiety tension, Dr. McKeown, and what relation could that have to the intercostal neuritis?

A. Well, anxiety tension is, one might say, a rather ephermal sort of thing that one has when they become extremely worried, anxious, and upset, and they say, the doctors call it an anxiety tension state. In other words, the patient is anxious, they are under tension and they are frightened, usually, and worried, and the various little things that they have had all their lives become pretty tremendous to them, and they come to a doctor with heart disease and cancer and many other things. [173]

Q. What relation do you think the tension had to Mr. Lyons' chest pain on this occasion?

A. I felt that he had reached that stage in his life when he had accumulated enough worldly goods that he could slow down and look at himself for the first time in his life, and he didn't like the looks of it, and he was worried about his health, and when he felt this pain he thought he might have heart disease and he came running for reassurance.

Q. Now, Doctor, after that occasion, did you have further occasions to examine Mr. Lyons and treat Mr. Lyons?

A. I can't recall, that is definitely without examining my records, but I believe I saw him a couple—a number of times. I saw him shortly be-

(Testimony of Dr. Raymond M. McKeown.)

fore he went to Mexico on this last fishing trip, and he was in my office possibly a half to three-quarters of an hour seated across the desk from me discussing himself, his business, and his health and his future plans. He made no reference to this at that time, or any disability of his body, no reference. No reference of any heart condition or anything and was going on this trip to Mexico for a rest.

Q. Doctor, did you treat Mr. Lyons on the occasion of his automobile accident? A. I did, sir.

Q. And would you describe, just briefly to the Court, the injuries he sustained in that accident and sequela that he might have had? [174]

A. This was in January of 1950, he was driving home, as I recall, late in the morning on a very slippery highway, and took a curve coming into Coos Bay too fast, he struck the curb on the right-hand side and slid across to the left, his door on his side flew open and it knocked him out and he slid on the left side of his body a distance of some 20 or 30 feet, and finally rammed himself up against the curb. He was picked up and brought to the McConlly Hospital where I saw him almost immediately. He had a fractured nose, contusions and bruises about his body, he had fractured left ribs. I can't remember the exact number, I believe it was four and five, and then his left hip, there was a question originally about a fractured hip, but it was not found so on the X-ray. He was in mild shock and a pretty sick individual. I had our local eye, ear, nose and throat doctor, Dr. Barkwell, to take

(Testimony of Dr. Raymond M. McKeown.)

care of the fractured nose, it was set and put in splints and we put him in the McConlly and treated it systematically. He left there possibly ten days, I believe, more or less, later to fly down to his home in California. X-rays were taken, electrocardiograms were taken, various lab tests were taken and he showed quite a considerable shaking up, but by the time he left, he was in good shape.

Q. Did you see him for anything—after the time he went to Palm Springs—for anything that arose out of that accident, Dr. McKeown? [175]

A. Not offhand, no sequela, I remember he gradually recovered, and I believe he had, as I remember, a left hemothorax.

Q. What is that?

A. Which is blood between the—should I say the lung and the chest wall in the pleural cavity on the left-hand side. I thought that was quite likely due to this fractured rib, and he saw Dr. McBride in Palm Springs, and I believe he recovered from that without any after effects whatsoever.

Q. I think you may cross-examine.

### Cross-Examination

By Mr. Kriesien:

Q. Dr. McKeown, I believe you stated that the anxiety tension state was the result of Mr. Lyons having slowed down; is that correct?

A. I don't think I used that term, sir, as I didn't mean it in that respect. What I meant, I



(Testimony of Dr. Raymond M. McKeown.)

had reference to was Mr. Lyons had finally climbed the hill, if you will, and secured enough security and enough worldly goods that for the first time in many, many years he had time on his hands to sit down and look at himself. Previously, he was an extremely busy individual, worked many, many hours a day, and did not pay any attention to anything.

Q. Now, you said that this intercostal neuralgia was the cause of this chest pain, I believe? [176]

A. That was my impression, yes.

Q. You said, I believe, it's true, that is the cause. Did you take X-rays of the spine and make that determination?

A. Yes, we have X-rays available of the entire body.

Q. At the time of this pain, did you take the X-rays and reach that opinion as a result of the examination of the X-rays? A. Yes, sir.

Q. That was your basis of your opinion at the time? A. They are available.

Q. Was it your opinion that Mr. Lyons had—had to be slowed down further than he was at that time, was he slowed down at all?

A. Yes. Well, yes, correct. We told him to take it easy and not worry so much.

Mr. Kriesien: May I have this marked for identification? We had better mark the entire file here.

Mr. Beebe: As a matter of fact, do you want Dr. McBride's record at this time, Mr. Kriesien?

Mr. Kriesien: Were these all furnished to me?



(Testimony of Dr. Raymond M. McKeown.)

Mr. Beebe: Yes, all of them. I don't know which ones, you thought, are material, everything but this last letter from Dr. McBride.

Mr. Kriesien: May I approach the witness, your Honor?

The Court: Yes, sir. [177]

The Clerk: Defendant's Exhibit 18.

(Documents were thereupon marked Defendant's Exhibit 18 for identification.)

Q. (By Mr. Kriesien): Doctor, did you inform Dr. William McBride of this occurrence in May of 1950? A. Of the accident of Lyons?

Q. No, of this chest pain.

A. I presume I did, you must have the record there.

Q. Well, I will hand you Exhibit Number 18, calling your attention to three handwritten notes on three sheets of paper of your letterhead and ask you if this is the letter that you wrote to Dr. McBride with reference to the occurrence in May of 1950 of the chest pain?

A. Yes, sir, that is my letter, I am glad to see it. I haven't seen it for a good many years.

Mr. Kriesien: We offer this in evidence, your Honor.

Mr. Beebe: No objection.

The Court: It will be received in evidence.

(Documents previously marked Defendant's Exhibit 18 for identification were thereupon received in evidence.)

(Testimony of Dr. Raymond M. McKeown.)

Q. (By Mr. Kriesien): Dr. McKeown, what was the reason for your advising that Mr. Lyons had to be slowed down?

A. For the same reason you take out a life insurance, you are not going to live to see the profit of it for long, in [178] other words, this boy if he kept on on the fast clip he was going at, something was going to happen, but I didn't know what.

Q. Then your recommendation was to prevent some ailment developing that might shorten or endanger his life? A. Certainly, yes.

Q. And what ailment did you have in mind, Dr. McKeown?

A. I didn't have any, sir; if I had I would have specified it in my letter to McBride.

Mr. Kriesien: That's all, Dr. McKeown.

### Redirect Examination

By Mr. Beebe:

Q. Dr. McKeown, would you give the background of the history that you knew of Jim Lyons and describe what you meant by slowing down? In other words, you must have had something in mind, something that he had been doing that you wanted him to stop?

A. Well, I think that to be generalized, I was concerned at the time right up to his death with his whole pattern of living. Nothing in particular, but he was a typical example of a representative type of aggressive logger and lumberman that we have

(Testimony of Dr. Raymond M. McKeown.)

had in Coos Bay area for many, many years. I can cite other cases comparable to his where the same type of people and they had gone on over the years, accumulating their money by any means at their disposal, and so often had [179] never lived to reap the reward. They died for many different reasons, some from accidents, some from disease, and I didn't propose to see a man whom I always considered a young man, I did not propose to see him, a friend of mine, come to a bad end by any means that I could prevent, but I had nothing specific in mind. I just figured the pattern of his living, the pattern in which he conducted his business and his affairs was such that if he went at the same rate of speed he'd get himself into some kind of trouble.

Q. That would hurt him?

A. Well, I figured it most certainly would.

Q. And when you refer to the pattern of behavior, do you refer to a pattern of debauchery or do you refer simply to the drive and energy?

A. Well, I wouldn't attempt to reconcile any one thing, because each thing he did was typical of the type of person he was. The way he drank, the way he spent his money, was nothing more or less than what all the rest of them were doing in some things, maybe he did a little better job than the rest of them did, but it was all the same thing.

Mr. Beebe: That's all.

(Testimony of Dr. Raymond M. McKeown.)

### Recross-Examination

By Mr. Kriesien:

Q. Doctor, one question; this type of drive and energy and tension that he was operating in, what is the most powerful [180] effect it would have on Mr. Lyons or the human body, that type of tension?

The Court: I think that calls for a great deal of speculation. In other words, Doctor, as I understand your testimony, the advice you gave to Mr. Lyons would be no different than you would make for any man of 48 years or 49 years of age who has, throughout his lifetime lived at a tremendous pace in a business way and in other ways. In other words, as a conservative doctor, you would give the same advice to me, for instance, if I came to you under similar circumstances; isn't that right?

The Witness: That's correct, sir. And I might add an observation, in my folder there is a communication from McBride, in which it says Palm Springs is filled with people like Jimmie Lyons and they have retired down there and are in poor health. If I might add that, sir.

The Court: All right. Is that all?

Mr. Kriesien: Nothing further.

The Court: You may be excused, Doctor.

(Witness excused.)

Mr. Beebe: Your Honor, I wonder if the Clerk has a clip or something. I have the whole of Dr.

McBride's record here, and we might as well put the whole medical record in, insofar as it is written. Would you mark all of those?

The Court: They may be marked. [181]

The Clerk: Plaintiff's Exhibit 19.

(Document was thereupon marked Plaintiff's Exhibit 19 for identification.)

Mr. Beebe: And 20.

(Document was thereupon marked Plaintiff's Exhibit 20 for identification.)

Mr. Beebe: We will show 19 to counsel, your Honor, and offer it in evidence, being Dr. McBride's office record.

The Court: It will be received.

(Document previously marked Plaintiff's Exhibit 19 for identification was thereupon received in evidence.)

Mr. Beebe: And 20, your Honor, being the electrocardiogram taken by Dr. McBride on February 24, 1953.

Mr. Kriesien: No objection.

The Court: It will also be received.

(Document previously marked Plaintiff's Exhibit 20 for identification was thereupon received in evidence.)

Mr. Beebe: Will you mark this?

The Clerk: Plaintiff's Exhibit 21.

(Document was thereupon marked Plaintiff's Exhibit 21 for identification.)



Mr. Kriesien: If the Court please, with reference to Plaintiff's Exhibit Number 21, the defendant will object to [182] the introduction on the ground and for the reason that it is not a record made in the course of the doctor's autopsy or inquest and was made at a later date, and bearing the date of the 21st day of February, 1953, and on the further ground that it merely contains a speculation as to the cause of death.

The Court: Pardon me, what does the document purport to be?

Mr. Beebe: That is a letter. It is a statement under the seal of the Delegacion Sanitaria of San Jose Del Cabo by Drs. Rodriguez and Serrano who conducted the autopsy, and they admit the scientific possibility of the shotgun explosion having something to do with the cause of death, and we offer it in evidence.

Mr. Maguire: That is prior to the time of the one that we made no objection to, when counsel went down personally and examined them.

Mr. Kriesien: It is our position that it is of no probative value, your Honor.

The Court: Well, I am going to allow it in evidence, it may mean something to me, and it may not. If it doesn't mean anything, I won't regard it.

(Document previously marked Plaintiff's Exhibit 21 for identification was thereupon received in evidence.) [183]

Mr. Beebe: You might just number these consecutively, beginning with that (indicating).

Mr. Maguire: Mr. Kriesien, I take it you will not want any further examination of Dr. McKeown?

Mr. Kriesien: No, sir.

The Court: You may be excused, Doctor, thank you.

(Witness excused.)

The Clerk: Plaintiff's Exhibits 22 to 37.

(Documents were thereupon marked Plaintiff's Exhibits 22 to 37, inclusive, for identification.)

Mr. Beebe: We offer Exhibits 22 through 37, inclusive, your Honor. They don't bear on any of the main issues. The only relevancy is, that if the plaintiff prevails, the date when interest would start to run, the negotiations between the companies and the formal proof of loss.

Mr. Kriesien: I object to them here upon the ground of their irrelevancy to any issue in this matter, your Honor.

The Court: Overruled. They may be received.

(Documents previously marked Plaintiff's Exhibits 22 to 37, inclusive, for identification, were thereupon received in evidence.)

Mr. Beebe: Perhaps I had better go ahead, Mr. Maguire, if I may be excused? [184]

The Court: Very well.

Mr. Beebe: Your Honor, I ran into Dr. Rush in the hall. There is one further question I might ask him and then we won't have to interrupt Dr.

Chamberlain. Will you resume the stand, Dr. Rush, please?

DR. HOMER P. RUSH

recalled as a witness on behalf of the plaintiff, having been previously duly sworn, testified further as follows:

Further Direct Examination

By Mr. Beebe:

Q. You have been sworn, Dr. Rush. You advised me at noon that you had made a mistake in answer to a question, you gave an incorrect answer?

A. I misunderstood your question, and——

Q. What question was it?

A. The question was when you asked me about the time element was between the time that I heard the second shot and the breathing.

Q. Of the beginning of the stertorous breathing?

A. That's right, I had in mind between the time I heard the breathing and when I started to walk back, and the time element would have to be some time longer than three or four seconds from the time I heard the second shot and when I heard the stertorous breathing. [185]

Q. How long would you estimate it was between the time you heard the second shot and when you heard the stertorous breathing?

A. At least 10 to 20 seconds. The other one, I was thinking of how long it would take to have the thought processes that was going on in my mind when I made the two-to-four estimate.

(Testimony of Dr. Homer P. Rush.)

Q. I see. Thank you, Dr. Rush. That is all I have now for Dr. Rush.

The Court: You let me know, gentlemen, when you are ready.

Mr. Maguire: He is coming, your Honor. [186]

DR. FRANCIS CHAMBERLAIN

recalled as a witness on behalf of the plaintiff, having been previously duly sworn, testified further as follows:

Further Direct Examination

By Mr. Maguire:

Q. You recalled this morning, Doctor, the factual matters which you observed on that trip and after this unfortunate tragedy; you have also heard, have you not, Dr. Rush's testimony?

A. Yes, sir.

Q. As to what had taken place. Dr. Rush just a moment ago, while you were out of the courtroom, corrected his testimony as to the length of time between the second shot or the last shot, rather, with the shotgun and the time when he first heard the stertorous breathing, from 10 to 20 seconds. He has so testified he had misunderstood the question this morning where he said three to four seconds that he was referring to the time that he heard the stertorous breathing and wondered what was going on.

Now, I wonder if—well, first strike that. What significance is there in the presence of atheromatous

(Testimony of Dr. Francis Chamberlain.)

plaques and a thickened aortic bicuspid or semi-lunar, rather, valves and as described in the autopsy so far as the capacity of the person having that condition to proceed along in the ordinary affairs of life to reach or exceed his life expectancy [187] or is a thing like that indicative of a sudden or early death?

Mr. Mize: If the Court please, I will object to that question as calling for an opinion of a witness on a subject matter that is not before this Court and not even concerned in this particular case.

The Court: I might say, I would like you to rephrase it a little better, Mr. Maguire, if you can, I didn't understand it myself.

Mr. Maguire: You would like me to rephrase it?

The Court: Yes.

Mr. Maguire: Well, the testimony in this case is that the deceased, James Lyons, upon autopsy, was found to have atheromatous, if that is the proper pronounciation, plaques on the arteries of the heart, the coronary arteries, that the semilunar valves of the aorata were somewhat thickened and hardened and that the same kind of plaques were found. There was nothing shown in the autopsy of either a coronary occlusion or a coronary thrombus. The autopsy merely revealed the fact that the caliber of the coronary had been reduced. What I wanted to ask you, is whether that condition so stated would in itself be any indication that the person who had that condition be any indication that the person who had that condition would have his life short-



(Testimony of Dr. Francis Chamberlain.)

ened or that he was in a situation where an early death from those conditions might be expected.

Mr. Mize: If the Court please, I objected to it as [188] propounded by Mr. Maguire on the ground that he used the words with reference to the semi-lunar valves that they were somewhat thickened and hardened, and such a finding is not incorporated in the autopsy report. The autopsy report said a thickening and stiffening of the aortical sigmoids with atheromatic deposits. On the further ground that the question of the shortening of life expectancy of a man by reason of this condition existing in a man, is not in issue in this case. The question in this case is what, if anything, was the cause of the death of the assured.

The Court: Overruled. You may answer the question, Doctor, if you understand it.

The Witness: Yes, I believe I understand it. I should like to say that atherosclerotic plaques in the aortic valves do not constitute a situation which would shorten a patient's life or put undue stress on the patient's heart, unless there are physical findings on a medical examination to show that they are of extreme degree. The main physical findings are a heart murmur, to have a derangement of the aortic valves without producing any heart murmur whatsoever, I don't feel would compromise the efficiency of the heart to any important degree.

Q. (By Mr. Maguire): Now, what does the fact that there was an absence of heart murmur, either

(Testimony of Dr. Francis Chamberlain.)

systolic or diastolic; what significance does that have in your judgment? [189]

Mr. Kriesien: Object to that question on the ground and for the reason that there is no evidence in this case that he did not have such a murmur except back in the year in May of 1950.

The Court: Overruled.

The Witness: Might I have your question again, I am sorry?

The Court: Will you read it, Mr. Reporter?

(Question read.)

The Witness: Well, I think that's the crux of the matter, because in the autopsy report they didn't mention anything about degree. They said there was some stiffening or some deposits and the heart in the average individual in this age group would certainly have some atheromatous deposits in various parts of the circulation, but if they are of significant degree, one then gets the clinical counterpart, that if they are of significant degree, there also is a heart murmur which corresponds in fact to these atherosclerotic deposits on the aortic valve, usually cause a critical condition if they are in extreme degree, not like the autopsy conclusion there of aortic insufficiency, but aortic stenosis, which stenosis bring about the heart murmur, that frequently in our medical findings is so loud you can hear it outside the chest wall.

Q. (By Mr. Maguire): When you speak of a stenosis, what do [190] you mean?

(Testimony of Dr. Francis Chamberlain.)

A. A narrowing of the valve.

Q. And there is in evidence here the notes and record as well as the deposition of Dr. McBride, and I believe you have read Dr. McBride's deposition; have you not?      A. Yes, sir.

Q. That he not only took E.K.G.'s but he also gave the exercise tolerance tests, and that all of these were within normal limits, I believe he said.

A. I read that report recently.

Q. Now, would the presence of either a systolic or diastolic murmur be, if that existed, would you say the heart was acting and/or behaving within normal limits?

Mr. Kriesien: If the Court please, I will object on the ground that I heretofore objected and on the further ground that it is asking this witness to give an opinion on an opinion of another doctor.

The Court: Overrule the objection.

The Witness: I am sorry, sir, would you read that again?

(Question read.)

The Witness: Not if there was a diastolic murmur, for example, some types of systolic murmurs are unimportant, but some of them are very important.

Q. (By Mr. Maguire): Well, would you say that the presence or absence of a systolic or diastolic murmur was what is [191] called an objective symptom?

Mr. Kriesien: If the Court please, I object to

(Testimony of Dr. Francis Chamberlain.)

the question on the ground that there is no evidence of the absence of this, and so if I may have a continuing objection, your Honor?

The Court: Yes. Overruled.

The Witness: The absence of a murmur can be taken as evidence. The absence of a murmur in connection with the aortic valve can be taken as evidence that the aortic valve is doing to good functional job.

Q. (By Mr. Maguire): Would the presence of any such murmur be an objective symptom in medical terminology?

A. Would the presence of a murmur be—you mean, a sign, you are referring to?

Q. Yes.

A. Not any murmur. Some murmurs are important and some aren't. But the presence of any diastolic murmur would be a sign of important disease of the aortic valve. The presence of loud—of some types of systolic murmurs would be evidence of disease.

Q. Have you examined the E.K.G.'s—may I approach the Clerk's desk, your Honor? Doctor, have you examined the E.K.G.'s which are in evidence here as Exhibit 17 and Exhibit 20, the first being an E.K.G. taken in February—on February 17, 1950, and the other on February 4, 1953?

A. I believe so. I'd like to—I have seen the previous [192] electrocardiograph which I guess was this one. I'd like to review it in a little more detail; yes, sir, I have reviewed them now.



(Testimony of Dr. Francis Chamberlain.)

Q. What do those electrocardiograms—first, take Number 17—what does that indicate as to whether or not the heart action is as shown there, does it indicate any diseased condition?

A. You mean Number 17?

Q. Yes, 17.

A. The one that was taken February 17, 1950?

Q. Yes.

A. This is a normal electrocardiogram. I might preface this by saying that there is a technical imperfection here that the one that corresponds—the doctor had the arm electrode crossed, which one can see on the inversion of the P wave in the first lead, so that knowing that, there is a technical abnormality, I mean a technical defect in the way the record was taken, which we can, or which I can be a hundred per cent sure that this is a perfectly normal electrocardiogram, and I say that in spite of the technical defect, it is quite a normal record.

Q. It is in evidence, Doctor, that shortly before, in fact two days before Mr. Lyons started to go on this trip, that Dr. McBride prescribed and gave him nitroglycerin and you heard Mrs. Lyons' testimony about the fact that he had a pain—complained of a pain during the night? [193]

A. She said in the evening.

Q. In the evening, yes. Now, what is the significance of that, first, having nitroglycerin prescribed?

A. Nitroglycerin is most commonly used to relieve the chest pain which is associated with coronary heart disease. However, I have major cause to



(Testimony of Dr. Francis Chamberlain.)

believe that that was not the reason for which it was given in this case. Because I have observed the doctor's record, and because the doctor——

Mr. Kriesien: If the Court please, I will move that that answer be stricken unless the records are referred to and the witness gives the facts upon which he predicates his answer.

The Court: Do we have those records available?

Mr. Maguire: Yes, oh, yes, sir, they are in evidence, your Honor.

Mr. Beebe: May I help you, Mr. Maguire, they are in two parts, because they came in separately. It is two parts; I am handing the Exhibits 18 and 19 to the witness (handing documents to witness.)

The Witness: May I read from the record?

Mr. Maguire: Yes, surely.

The Witness: The record is dated February 4, 1953. This is Dr. McBride's office record. "Has had an attack of chest pain yesterday and today, constriction in chest with radiation down arms. I guess it is fluoroscopic E.K.G. not diagnostic. [194] Sed rate"—I think it looks like "O.K. Also W.B.C. and uric acid. R.X. nitroglycerin 1/200 on onset of pain, may need Thaverine," or something like that, which I understand is some type of vitamin, and then on the next date he says, "Pain some improved. Advised to go fishing." And then there was a subsequent letter, I believe from this same doctor where he described—or was it deposition that he made—a letter from him wherein he described his findings

(Testimony of Dr. Francis Chamberlain.)

stating that he felt that this represented fatigue, which I don't have here.

Q. (By Mr. Maguire): That is not in evidence, Doctor. You can't consider it, it is not in evidence.

A. I see, but I should say with respect to nitroglycerin, that we give nitroglycerin to patient's with three purposes in mind. One is to relieve heart pain, the second most common use is to find out—to try to find out if a given pain is from the heart or whether it might be from the other cause which we have to—we are called on most commonly to determine, and that is fatigue, so we prescribe this nitroglycerin, and say, if you get this pain again, take the nitroglycerin at the onset, and come back and tell us if it relieves it or not, and so it is also a diagnostic test. The third is that it relieves some types of indigestion not related to the heart.

Q. What significance is there, Doctor, that this heart pain [195] which he complained or told Dr. McBride about and the type of occurrence he told his wife and it took place in the evening before going to bed, and after going to bed, and can you say whether it was an anginal pain or whether it was something else?

A. I think that may be quite important, because the pain of angina or the pain of a true coronary heart disease, which we know of as angina, comes on while the heart is carrying on a peak of effort. It's during intercourse, during excitement, during anger. While he is climbing the steepest part of a hill rapidly; while he is lifting something heavy;

(Testimony of Dr. Francis Chamberlain.)

while he is carrying on the peak of exertion, not some time afterward, which is the way it appears, which is related to fatigue, to a person who is exhausted from emotional or physical causes. That pain is in the chest and it is often also radiated down the arm. That pain comes on usually at the end of a day when a person is tired. In other phases, it is part of a fatigue in the way of a headache or backache, he gets a chest ache or something and the evening is the commonest time for that pain to appear for the first time.

Q. You have been in the courtroom, have you not, Doctor, while all the testimony has been given with respect to Mr. Lyons' activity, his physical condition, his drive, his life work and matters of that kind, have you not, and you also heard the testimony of Dr. Rush as to what took place [196] as he observed while you were on the fishing trip up to and including the time of the catastrophe?

A. Yes, sir.

Q. And of course you have in mind your own observations and you have in mind the autopsy findings of the physical condition? A. Yes, sir.

Q. Bearing all these matters in mind, Doctor, what in your opinion was the cause of the death of James A. Lyons?

Mr. Kriesien: If the Court please, I do not believe that question incorporated the facts on which this opinion is being predicated. For that reason, I will object to it.

The Court: Overruled.

(Testimony of Dr. Francis Chamberlain.)

The Witness: May I preface that? You are asking me my opinion of the death and so on. I would like to call attention to one point about the autopsy which I felt my answer is based in part on, and that is that the autopsy conclusion was that this man died from aortic insufficiency. This is at variance with the description that the autopsy surgeon made of the heart. It is also at variance with the clinical observation made prior to this man's death to the effect that he had no murmurs, so I should like to state that first, as getting a little background of my opinion, if aortic insufficiency which the autopsy performed—I mean the autopsy conclusions stated this man was thought to have died from was not [197] described in it at all in the body of the autopsy. Furthermore, the aortic insufficiency, the two great causes and nearly all of the first causes of aortic insufficiency are syphilis in the artery, which is not present in this man, and rheumatic heart disease, with distortion, deformity of the valves due to rheumatic processes, which again the autopsy surgeon did not describe. Therefore, I concluded that their final conclusion is in error and that there is no evidence for aortic insufficiency in this patient. Now, I'd like to also say—well, I think that's enough of my preamble. Yes, sir, I'd like to say, from the autopsy findings, that the amount of arteriosclerosis described, or the atheromatous plaques in this man's coronary disease from their description, their description is rather nebulous. There is some atherosclerotic plaques. There was not an occlusion. I would like to say that the amount of atherosclerosis in the aorta



(Testimony of Dr. Francis Chamberlain.)

which these men described does not impress me as necessarily being of importance to our—I should say abnormal for a man of this age group, since nearly all men 49 years of age have atherosclerotic deposits in their coronary vessels, so that I don't feel that any description unnecessarily beyond what the average man that age has has been described. I would further like to state that this man's death was no ordinary death. I thought of course immediately that he died of gunshot wounds that had gone from his face up to his brain. [198]

Mr. Kriesien: If the Court please, I would like to move that the answer of the witness be stricken as not responsive to the question propounded.

The Court: It may go out on that ground.

Mr. Beebe: The entire answer, your Honor?

The Court: Yes, it may go out and he can start over again.

Mr. Maguire: Your Honor, I didn't know counsel objected to the phrase that this is not an ordinary death—

Mr. Kriesien: No, I objected to the entire answer, asking that it be stricken.

The Court: He objected to the entire answer and I struck the entire answer. I think you should start over again.

Q. (By Mr. Maguire): I see. Now, referring to the autopsy itself, Doctor, there are certain conclusions in regard to the possible cause of death. I will read them, and I believe you stated you are familiar with the findings as shown in the autopsy here?



(Testimony of Dr. Francis Chamberlain.)

A. Yes, with the findings of the autopsy.

Q. Yes. Now, it is considered, as the direct cause of death, aortic insufficiency probably brought about the acute cardiac failure. In your experience and in your opinion, Doctor, in view of the physical findings shown on the autopsy could and would aortic insufficiency be the cause of an acute cardiac failure?

Mr. Kriesien: Your Honor, I object to that question on [199] the ground that it is based—calls for the opinion of this witness on the opinion of some other doctor, and does not contain all the facts in evidence.

The Court: Well now, counsel, I will tell you. If you were trying this case before a jury, I would sustain the objection. But I am taking this position in the trial of this case, I want every bit of information I can get that will help and aid and assist me in deciding it, and for that reason and that reason alone, I am going to overrule the objection.

Mr. Mize: If your Honor please——

The Court: That's all. It is your duty to preserve your record.

Mr. Mize: In order to preserve our record.

The Court: You may answer the question.

The Witness: Yes. You are asking if——

Q. (By Mr. Maguire): In view of the physical findings set forth in the autopsy, in your opinion, aortic insufficiency existed?

A. No, I don't feel that the autopsy shows the presence of aortic insufficiency.

(Testimony of Dr. Francis Chamberlain.)

Q. And that—for what reason?

A. For the reason that the description of the aortic valve was that of atherosclerotic plaques causing some stiffening. I think the words were, “of the valves,” that atherosclerosis is [200] not one of the causes of aortic insufficiency, that the two great causes are rheumatic heart disease and syphilitic heart disease, which are not described here, and I should like to further advise here that atherosclerosis occasionally can cause aortic insufficiency of a very slight relatively unimportant degree, if the patient, at the same time, has high blood pressure.

Q. Did Mr. Lyons have high blood pressure?

A. No, sir, not according to the record. The blood pressure reports I have seen were normal.

Mr. Mize: Are you referring to Dr. McBride's reports?

The Witness: Yes, I am referring to Dr. McBride's records, and I am sure there are blood pressure reports of Dr. McKeown.

Mr. Mize: Well now, if your Honor please, I move to strike the answer from the record as to the blood pressure. I think he can testify from any records as to a particular time what this man's blood pressure was, but I think we all realize that blood pressure can vary in certain circumstances.

The Court: Motion granted.

Mr. Maguire: Well then, just limit—your Honor, I take it you are objecting to McKeown's, not the one made by Dr. McBride?

Mr. Mize: I stated my objection, read it back.

(Testimony of Dr. Francis Chamberlain.)

Mr. Maguire: Well, I didn't want to ask the question—I will ask you, from the records of the blood pressure tests made by Dr. McBride on the date, I believe was February 4th, [201] disclose any high blood pressure?

Mr. Mize: I object to that, your Honor, on the ground that the records of Dr. McBride speak for themselves.

The Court: That is correct. Sustained.

Q. (By Mr. Maguire): Very well. May I have that record? Will you examine Exhibit Number 18, Doctor, and note the pages and time where blood pressure is shown?

A. Yes, February 1, 1950.

Q. Well, wait a minute. Did that—is that Dr. McBride's?      A. Yes, this is Dr. McBride's.

Q. Can you find any blood pressure record made by other persons? You can use that.

A. There is one of 146 over 76 described February 1, 1950.

Q. (By Mr. Maguire): How would you characterize that blood pressure as to whether it is normal, above normal, or below normal?

A. It's within the normal range.

Q. I hand you one here for—

A. January 25, 1951, blood pressure 120 over 80.

Q. What can you state as to whether or not that is high, low, or normal?

A. That's within the normal range.

Q. Can you find any further ones in these?

A. Pardon me?

(Testimony of Dr. Francis Chamberlain.)

Q. Did you find any further blood pressure records in there? [202]      A. I didn't notice any.

Mr. Beebe: Here is another one, Mr. Maguire.

Mr. Mize: Your Honor, I move that the answer to this question as to the condition of the blood pressure in 1950 and '51 be stricken from the record on the ground that it is immaterial and does not prove or disprove the condition of this man's blood pressure on the day it occurred.

The Court: I don't think the case is going to be decided on that. I don't see any harm in letting it in the record. Motion denied.

Q. (By Mr. Maguire): I hand you now a medical record which apparently is of December 31, 1952. Can you find any record there of blood pressure?

A. Yes, December 31, 1952, blood pressure 142 over 80 in the left arm and in the right arm 124 over 80.

Q. What can you say as to the range of that?

A. Those are both within the normal range.

Q. Is there anything abnormal with the fact that one arm showed a little higher blood pressure than the other?

A. Not necessarily. The arm in which the blood pressure is first taken usually is apt to have a higher blood pressure than the other.

Q. I also note, Doctor, that the blood pressure taken on May 12, 1950, by Dr. McKeown discloses 142 over 80. Is that within normal limits? [203]

A. Yes, sir.

Q. And finally, I note further that on—now,



(Testimony of Dr. Francis Chamberlain.)

Doctor, I will ask you to state whether or not—what in your opinion from your personal observation of the history given of Mr. Lyons' health, the medical records; the testimony of Dr. Rush as to what he saw, what in your opinion was the cause of his death, Mr. Lyons' death?

Mr. Kriesien: If the Court please, object to that on the ground and for the reason that it again requires this witness to base his opinion upon the opinion of others. It does not limit the opinion to number one, the facts that this man observed and the findings of the autopsy report which are the only things that this individual is qualified to render an opinion from.

The Court: I think that is what we are trying to find out here as to what caused his death. I am going to allow the doctor to answer.

The Witness: I have examined all the facts and it is my belief from the examination of these facts that this man died as a result of the gunshot wound to the face.

Mr. Kriesien: If it please the Court, we move to strike that testimony from the record. That is not the cause of death but would be the precipitating cause of death and there is no evidence in this case that the man died as a result of the gunshot wounds.

The Court: I will overrule the objection.

Q. (By Mr. Maguire): Why did you say that that was the cause of death, what did it do, in your opinion?

A. I think that the gunshot caused Mr. Lyons



(Testimony of Dr. Francis Chamberlain.)

suddenly to have pain. He was startled. The usual reaction is one of anguish, as well and that these things then create the clinical condition which we refer to as "shock." I think that—so that I think they produce shock at the same time I feel that the patient—that the gunshot wound was the direct cause of his heart developing an unusual abnormal rhythm.

Mr. Mize: Just a moment, I'd like to move to strike that answer on the ground that the witness stated that "I think they produced shock," he does not state that in all probability they produced shock.

The Court: Well. I am going to deny the motion. Now, Doctor, this man Mr. Lyons was an experienced woodsman and hunter as has been testified to here. How do you account for the fact that the mere discharge of a shotgun would so disturb the function of his heart and rhythm that it would cause his death unless there was some pre-existing condition there which was present at the time of the firing of the shot?

The Witness: Well a man like—such as this—who was an experienced hunter who had a gun go off in his face, this is emotionally in my opinion, apt to be much more shocking than some greenhorn. This man had prided himself and he had [205] so told me. I wasn't asked, but I should be glad to mention it. in the course of the earlier discussion I mentioned that he and I spent a good deal of time talking about children and having them brought up

(Testimony of Dr. Francis Chamberlain.)

by women, and that is his main thought in this respect was to see that his only son was taught to be an experienced hunter, and that in spite of various objections from the feminine side, that he had been able to convince everybody that this boy should be taught to be a hunter, that this was a man's sport, that it could be done in complete safety. I think that probably means that his foundation of his consciousness of what was right or wrong, good or bad, perhaps was such, I think, that to him would be a greater shock than I, as a once-in-a-while hunter. I would think that that was one factor in contributing. I also felt from the observation I made of his face, certainly he received—there was evidence on his face of a good deal of trauma, I assume from the gun, that the man must have had a good deal of pain. Now, hearts, though such an instrument which is normal can develop abnormal rhythms it is true, they are more apt to develop abnormal rhythms in the heart as a result of some underlying disease. My feeling that the man had an abnormal rhythm is based on two or three unusual facts. One of these is that Dr. Rush, who was an experienced observer, who was this man, has told the Court that he felt a purring on this man's chest; a purring on a man's chest is a very unusual finding to observe when a man is unconscious, and [206] the usual cause of the purring sensation on a man's chest, when he is entirely unconscious, providing the purring sensation did not pre-exist, is an unusual type of heart rhythm which we refer to as ventricular fibrillation

(Testimony of Dr. Francis Chamberlain.)

or ventricular flutter, that is the purring sensation, then I think, as I have stated earlier, as I mentioned earlier, this was no ordinary type of death, because that man—I should say that usually when a heart stops suddenly, and I have seen it happen many, many times in my work—when a heart stops suddenly there is a short period of time, a few seconds, and then a patient develops the stertorous snoring type of breathing. The stertorous snoring type of breathing usually lasts a period of a half minute or less. This stertorous type of breathing in this man continued for a long time. This continued, Dr. Rush described, for a good many minutes. I have another reason—may I go on? I have another reason for believing that this was a rhythm of this type, and that is that this man who previously demonstrated no signs of heart failure, even though we observed him and were with him constantly, that this man showed something else which was unusual, and that was that Dr. Rush described two or three minutes after he had watched him with this stertorous type of breathing, the foam and then pink-tinged foam appeared at the mouth, and even the Mexican autopsy report stated the man had signs of congestion in his lungs, and congestion in [207] his liver.

Now, a man whose heart suddenly stops does not develop manifestations of congestive heart failure in a half minute. It takes at least a few minutes to develop. Furthermore, there was evidence brought out by Dr. Lehman this morning that there was in-

(Testimony of Dr. Francis Chamberlain.)

duration, swelling around the lacerations on his face, which don't occur momentarily, but take a matter of a few minutes to develop. For all those reasons then, I believe that this was not an ordinary death. That the gunshot touched off some unusual heart rhythm, that is the ventricular fibrillation, or perhaps a combination of these two or another rhythm which I have observed, and which may occur is what we call the ventricular tachicardia where the heart beats very rapidly at the rate of about 300 a minute, much too fast to have sufficient filling to be able to drive blood to the brain sufficient to let a patient maintain consciousness or to nourish the brain and yet sufficient to produce that purring sensation and allow life to be maintained for a longer time than usual, so for all these reasons I think that that suggested an unusual mechanism must be called in which is the only explanation that I can make in this particular case.

Mr. Kriesien: If the Court please, I move to strike the entire answer of the witness on the ground and for the reason that it was not responsive to the question propounded by the [208] counsel.

The Court: The motion is denied. We will take a short recess.

(A short recess was had.)

The Court: Proceed.

Mr. Mize: May it please the Court, I would like to state another ground for our objection to the last question, if I may, a recess came in between here.



(Testimony of Dr. Francis Chamberlain.)

I wish to object further to the answer of the doctor and move that the same be stricken as well as those answers concerning which he testified as to his opinion as to the cause of this death on the ground and for the reason that his opinion could only be based on a hypothetical set of facts which are in evidence and for the further reason that the doctor is assuming one particular fact which is not in evidence and that is the shotgun was discharged prior to the time that this man had a heart attack, and I would like to have that objection shown in connection with all of his answers in connection to his opinion as to the cause of death.

The Court: The objection will be noted in the record and be overruled for the reasons I have previously stated.

Mr. Maguire: Your Honor, I think I should make a statement, this is the third week that I have been in court every day on other cases, and Monday of this week, we had a full day's hearing before Judge McColloch. The only reason I [209] took to examine the doctor, because Mr. Beebe prepared all that, because I had part in the matter of the crux of the thing that he saw, and I want to confess to your Honor that it is very difficult for me to take the technical matters because of over tension, and Mr. Beebe is prepared, and in addition to that, I want to say this to your Honor, I would have stayed home because of extreme exhaustion, and I would crave your Honor's indulgence, that Mr. Beebe pre-



(Testimony of Dr. Francis Chamberlain.)

pared this part of the case, that Mr. Beebe take on this part of the case.

The Court: Do you have any objection?

Mr. Kriesien: No objection.

The Court: All right.

### Further Direct Examination

By Mr. Beebe:

Q. Doctor Chamberlain, what is meant by a heart murmur?

A. A heart murmur is a whirring, buzzing sort of a sound which one hears in a stethoscope over—usually best over the area of the heart from which the sound originates.

Q. And what is a thrill?

A. A thrill is something—is a vibration of the chest wall which one can feel with his hands under circumstances where there is an unusually large murmur. In other words, it's not only loud enough or forceful enough to make vibrations in it, but one can feel it with the hands, so that a very loud murmur is—or a thrill is also associated with [210] a very loud murmur.

Q. And you might say then, a thrill is a palpable murmur, one that you don't have to have a stethoscope to detect; is that correct?

A. Yes, that's correct.

Q. And occasionally—and what is a symptom in medical terminology?

(Testimony of Dr. Francis Chamberlain.)

A. A symptom is something which a patient feels or perceives. Something which the patient perceives I suppose is the best.

Q. In other words, a symptom is something a patient would include in his subjective complaints; is that right?

A. That's right, they may be important or unimportant. It is something which he perceives or which a patient is aware of with respect that it is something of some sensation in his body.

Q. An objective symptom is one that can be seen by the doctor; is that correct?

A. It's sort of a misnomer and an objective finding is something which we call those findings which the doctor would have to perceive through any of his senses, the stethoscope, the eyes, the hands, or those that are objective manifestations of disease.

Q. Now, Doctor, can the heart beat and there be an absence of sense of pulse?

A. Yes. If the heart beats ineffectively there may be an [211] absence of pulse at the wrist or out in the periphery. In other words, especially if the heart beats very rapidly, the heart does not have long enough to fill. It only stops long enough between beats to fill so that when it then beats it only drives a column of blood out, a relatively solid and effective column of blood, a short distance or drives at a head pressure that one can perceive by putting his hand at the wrist or foot or neck.

Q. Is it possible for the heart to beat and not put out enough blood for nourishment?

(Testimony of Dr. Francis Chamberlain.)

A. Yes.

Q. Would that occur in a situation where you had a heart beat but no pulse?

A. Yes, that certainly could.

Q. Now, Doctor, are there many different types of heart rhythms?

A. Yes, sir, there are.

Q. Now, Doctor, what, in medical science, is the pain of angina pectoris?

A. The pain of angina pectoris is more commonly a pressure sensation than a pain, which usually includes the mid-line of the chest, but which may occur—may be perceived on the chest, jaws, arms, back. There is a variety of locations and occurring usually while a heart is called on to carry a peak load due to inadequate blood supply to the heart muscle [212] and lasting—if the effort is stopped or if the predisposing cause is stopped so that the patient suddenly stands still and stops climbing the hill, the pain usually disappears in a matter of two or three minutes.

Q. What is the pain of true coronary heart disease; how would you describe it?

A. That's what I have been describing, the pain of angina pectoris is indication of true coronary heart disease. There are two big broad subdivisions of coronary heart pain. One is where it cannot clear itself, and angina pectoris is where there is suddenly a big demand of the heart for blood which isn't forthcoming due to some transient affair and the other big subdivision of coronary heart pain is

(Testimony of Dr. Francis Chamberlain.)

where a coronary occlusion, a coronary thrombosis, occurs where the heart muscle itself suddenly drives ahead, where there is a long episode of pain of a half an hour to two or three hours after or in the course of which pain a lot of the patient's heart muscle dies.

Q. Is there any other significant type of heart pain other than which you have described?

A. Of heart pain?

Q. Yes, actual pains from coronary disease of one kind or another?

A. No, those are the two big manifestations of pain in coronary heart disease. [213]

Q. What is cause of pain in the arm when there is an attack of angina pectoris?

A. The cause of this pain is the fact that the patient has given his heart a big load to carry for which it cannot get sufficient blood, by virtue of the things mentioned, usually it's because of occlusion, actually, of several branches. Coronary arteries, it has been shown for example.

Q. What do you mean by "occlusion," Doctor?

A. Closure. It's been shown by Slessenger and Bloomgard, some 15 years ago, as a lot of our concept about this, that before a patient gets heart pain he usually has occlusion or complete plugging of at least two and in the average three major branches of his coronary blood supply.

Q. Now, Doctor, is a weakness in the arms or an inability to lift or hold a small object such as a telephone during an attack of chest pain radiating

(Testimony of Dr. Francis Chamberlain.)

down the arm, is that indicative of angina pectoris pain?

A. No, not at all, because if the pain from angina pectoris radiates down the arms wherever the pain originates, it will radiate down that part of the sensory nerve, not the motor nerve. There is no weakness whatever in the part of the body which the pain or pressure sensation may be radiated to, nor is there aggravation of a pain by movement of that affected member.

Q. Now, Doctor, what is meant by the—no strike that. [214] In your experience, to what is the greatest percentage of chest pain complaints referable; to some kind of heart disease or ailment?

A. No, far and away the greatest—the highest incidents of pain that I, as a heart specialist, see is the pain which is complained of as a manifestation of fatigue, rather than the pain of true heart disease.

Q. And what is the immediate cause of that pain, other than the tiredness; I mean what is the factor that brings about the pain?

A. The physiological factors are disputed, and there are probably several different factors that may enter in, one of them is the matter of arthritis of the spine, which causes irritation of various nerves, and radiates from the spine and it's assumed that under circumstances of fatigue, these nerves which are constantly irritated to some degree when a person is tired, that the threshold is exceeded and that those nerves become painful. A mechanism is one



(Testimony of Dr. Francis Chamberlain.)

wherein some intelligent introspective individual is told you may have trouble with your heart, your father died from that, or your next-door neighbor dropped dead from that, so that an intelligent person will say, I will watch that, I want to be sure that I am all right, and by that method of concentrating on this particular part of the particular individual in the meantime, that individual over a period of time, begins to develop [215] pain, and we think that by this mechanism of intelligence, of awareness of this part of the anatomy, that he has developed and gotten steamed up and sensitive, so that when the particular individual, instead of getting tired and having a headache, he gets tired and has a chest ache.

Q. Now, Doctor, if there is an aortical insufficiency, are there signs that a doctor can see in the man?      A. Yes.

Q. What are those signs?

A. If there is an important degree of aortic insufficiency, merely observing a patient, as you and I are sitting across from each other, the throat bare, for example, one can see the neck pulsating and the great vessels in the neck, and one can diagnose, that is if a person doesn't have a necktie on, can judge very often by merely watching the blood vessels, the big blood vessels, big arteries in the neck pulsate much more actively than usual.

Q. Would those signs be more obvious say, if you saw a man that had participated in a strenuous exercise?      A. Yes, they can.

(Testimony of Dr. Francis Chamberlain.)

Q. Did you think Mr. Lyons—did he wear an open-neck shirt?      A. Yes, sir.

Q. Did you see any such signs?

A. No, sir.

Q. Now, Doctor, you testified a few moments ago that on a [216] question of acute coronary insufficiency or significant coronary insufficiency, I believe, that the presence of atheromatic deposits on the aortical or semilunar valves would not be significant unless it was accompanied by high blood pressure and hypertension; have I correctly restated your testimony?

A. I said that aortic insufficiency as a result of arteriosclerosis or atherosclerosis, would not be expected to occur except in the presence of hypertension.

Q. Now, what kind of hypertension do you refer to, Doctor, when you refer to where it is high one moment and down the next?

A. No, one would expect it to be associated with a sustained hypertension and usually one of moderate or severe degree.

Q. And has that been your experience, Doctor, in your practice of the profession?

A. Yes, seven per cent of severe hypertension are known in the literature to develop some degree of aortic insufficiency as evidenced by heart murmur and substantiated usually at autopsy findings to the fact that the heart valve or aortic valve is somewhat dilated.

Q. Are you finished?

(Testimony of Dr. Francis Chamberlain.)

A. I—yes, I was going to say that nearly always that type of aortic insufficiency which is a result of that condition is not a severe degree and usually it's only severe [217] enough to produce a murmur and it is not a great load on the heart. It isn't considered to be an important burden.

Q. Now, Doctor, where there is a death from an acute attack of coronary insufficiency, is that, in your experience, a sudden death, or are there evidence of—or do evidence—perhaps, I had better state it this way: In a death from acute coronary insufficiency, I mean acute aortic insufficiency, is that, in your experience, a sudden death?

A. No. Of aortic stenosis of a severe degree, 20 per cent die suddenly, but aortic insufficiency is not one of the common predisposing factors to sudden death.

Q. Now, Doctor, from the autopsy report here and from Mr. Lyons' clinical history, and incidentally, Doctor, any questions I ask you concerning the medical history, I do not want you to take into account any opinions as distinguished with medical facts which have been made by other doctors.

A. I don't believe I have taken any opinions.

Q. No, disregard any other expert's opinion, take in account only facts and medical facts as distinguished from opinions. Now, Doctor, in the medical or in the autopsy report is there any physical findings indicating that there was any aortic stenosis in Mr. James A. Lyons?

(Testimony of Dr. Francis Chamberlain.)

Mr. Mize: Objected to, your Honor, the autopsy report speaks for itself. [218]

The Court: Overruled.

The Witness: I don't think so. The autopsy report mentions some stiffening of the aortic valve leaflets, the sigmoid valve leaflets due to atheromatous deposits. In aortic stenosis, there is a terrific thickening of the valves to the point where the aortic—the opening in the aortic valve is very strikingly reduced. None of those things have been mentioned here.

Q. And what is the cause of aortic stenosis?

A. The commonest cause is rheumatic fever which is damage to the valve in youth and then there is another group of individuals in which calcium deposits all around the valve and which is referred to as calcareous aortic stenosis, but they fall into that particular group—those two groups, rheumatic fever and calcareous.

Q. Now, Doctor, in a death from coronary insufficiency, how does that occur, over a period of time? How much time would that take to occur?

A. The death from acute coronary insufficiency?

Q. I beg your pardon, I mean aortic insufficiency; did I say coronary?

A. If aortic insufficiency causes death, the mechanism is not one of sudden death, the mechanism is usually one of heart failure which usually takes—lasts a matter of two months to two years, so that there are manifestations of heart failure as a result.



(Testimony of Dr. Francis Chamberlain.)

usually, the patient as a rule dies of [219] heart failure.

Q. Now, Doctor, you have been in the courtroom throughout this entire trial while evidence has been given; have you not?

A. I may have missed a few minutes.

Q. That is while evidence has been given, have you missed any evidence?

A. I think the only thing I missed was the part of your talk at first.

Q. When I made my opening statement?

A. Yes, I missed that part of it.

Q. Well, that isn't evidence, Doctor, you have been here all during the taking of testimony; is that correct?      A. Yes, I believe so.

Q. And again, cautioning you not to take into any account, any opinions of any other experts, just facts, including medical facts, and assuming the testimony you have heard—pardon me, before I ask that question, Doctor, you have mentioned shock. What is the mechanism of shock; what does it do to a person with respect to the circulatory system and the blood?

A. The exact mechanism of shock isn't understood, a great deal of it is motivated through reflexes which come through nerves, but the effect on the heart, well, I should say part of the pattern in shock is that the blood pressure drops [220] strikingly due to reflex changes in the central nervous system. The blood tends to pool in reservoirs in venous reservoirs, and especially in the digestive



(Testimony of Dr. Francis Chamberlain.)

tract, so that blood, the amount of blood which is circulating in the vessels, which is actively carrying the blood, is markedly decreased. These reservoirs, especially on the return side of the trapped blood, hold it out of the circulation, so that there is in that mechanism a decreased amount of circulating blood, at the same time, with the lack of the proper amount of circulating blood and the lack of proper blood pressure, there is the lack of oxygen in the blood and the lack of oxygen in the blood makes the capillaries in the body and the tiny vessels abnormal to the point where the liquid material in the blood can ooze through the capillary walls so, as a result of all these mechanisms, the amount of blood which then is circulating in the major active circulation of the body is markedly decreased, so therefore the amount of blood which goes to the heart is decreased.

Q. Doctor, I will show you—first, I will have them marked.

The Clerk: Plaintiff's Exhibits 38 and 39.

(Documents were thereupon marked Plaintiff's Exhibits 38 and 39 for Identification.)

Q. (By Mr. Beebe): Doctor, I will show you two charts and ask you if they would be of assistance to you in describing [221] or explaining the matters you were just saying concerning shock?

A. This one is upside down.

Q. I have it upside down. You may use it in making your testimony clear.

(Testimony of Dr. Francis Chamberlain.)

A. Yes. May I demonstrate?

Q. Please indicate the exhibit number, Doctor, and please mark it, don't say "here and there," but make marks so we can identify them.

A. Yes. The chart in my left hand, which I will mark——

Q. No, it is Exhibit Number 39.

A. Number 39 represents schematically the blood in its ordinary circulation with the blue representing the veins and carrying the blood into the heart, and this little network representing the capillaries and the little venous channels where the blood goes out to the main body tissues and in this particular case, this represents the mixing of the blood in the lungs.

Q. Now, Doctor, you said "this," will you put a mark?

A. In number one we have the circulation of the lung; represented in number two we have the circulation in the major tiny capillaries throughout the body with the exception of the lungs and with the exception of the digestive tract. I should also let it be known that number two also represents that——

Q. Represents what? [222]

A. Represents the capillaries. It's what we call the greater circuit, the capillaries, with the exception of those in the lungs and with the exception of those in the digestive tracts. Number three would represent the capillaries in the digestive tract, and the red coloring represents the blood as the oxygen—deoxygenated blood where it leaves the heart and

(Testimony of Dr. Francis Chamberlain.)

goes out in the various veins, so that's a rough schematic representation of the circulation from a patient who does not have shock.

Q. And the arrows represent the direction of flow of the blood?           A. Yes.

Q. We offer in evidence Exhibit Number 39 for the purpose of illustration.

Mr. Kriesien: No objection for the purpose of illustration.

The Court: It will be received for the purpose of illustration.

(Document previously marked Plaintiff's Exhibit 39 for Identification was thereupon received.)

Q. (By Mr. Beebe): Now, you are holding Exhibit Number 38 for Identification, Doctor, and will you describe that?

A. This shows the situation, a rough example of what happens to the situation in a patient who has shock, when the patient [223] has shock the various little reservoirs which are present throughout the body have stopped at the capillaries. The capillaries become markedly dilated, so that it makes reservoirs so that the blood actually stagnates out in these places instead of being continued in the regular flow of circulation, so that schematically there is a lot of blood in those little capillaries and will also ooze a lot of blood, a lot of the liquid from the blood out in the tissues.

Q. Doctor, let me interrupt you, in doing that

(Testimony of Dr. Francis Chamberlain.)

you have referred to the blue-colored veins in the chart, have you?      A. Yes.

Q. As reference to where the blood stagnates?

A. Yes, and especially in the place where the blue-colored small network of veins and the vessels and where the small interlacing red network of vessels go together, then schematically, then, what happens is that the blood—some of it has been lost out in the tissues and a great deal of the other blood tends to stagnate in these vessels and so that then even under circulation, which the—where the heart may be quite normal—the heart is interfered with in its activity because it can't get a proper amount of blood with which to—I mean the proper amount of blood to carry on, to give the body its proper nutrition, and it is important in this diagram due to the fact that the great vessels that go to the heart and the great vessels that go away from the heart are shown as small [224] lines, it necessarily is the fact that the amount of blood, which is going through those vessels is decreased in amount.

Q. Thank you, Dr. Chamberlain. We offer in evidence, Plaintiff's Exhibit Number 38 for the purpose of clarifying the record and illustrating the testimony of the Doctor.

Mr. Kriesien: No objection for the purpose of illustration.

The Court: Received for that purpose.

(Document previously marked Plaintiff's Exhibit 38 for Identification was thereupon received.)



(Testimony of Dr. Francis Chamberlain.)

Q. (By Mr. Beebe): Now then, Doctor, based on the clinical record and history of Mr. Lyons; excluding the opinions of any other doctors; plus the testimony that you have heard here about his physical condition and his activities; and assuming the facts found on autopsy; do you have an opinion as to whether Mr. Lyons was suffering from aortic stenosis?

Mr. Kriesien: If the Court please, we object to the form of the hypothetical question on the ground and for the reason that it does not incorporate all the facts. We do not know and have no way of knowing the facts upon which this witness is predicated his opinion under that form of a question.

The Court: Overruled.

Q. (By Mr. Beebe): You may answer. The question is: Do you have an opinion? Now, you answer that yes or no, otherwise [225] it will be objected to as it is not responsive. Just answer yes or no.

A. Would you ask the question again? I lost the trend, please?

(Question read.)

The Witness: The answer is yes, I have an opinion.

Q. (By Mr. Beebe): What is that opinion?

A. That he did not have an aortic stenosis.

Q. Will you give the reasons for your answer?

A. The reasons are twofold. One, based on the description of the leaflets of the aortic valve and



(Testimony of Dr. Francis Chamberlain.)

the second, based on the medical records showing that no murmurs were present in the reports.

Mr. Kriesien: If the Court please, we move the witness' answer be stricken on the ground and for the reason that there is no evidence in this case that the assured did not have a heart murmur.

The Court: Motion denied.

Q. (By Mr. Beebe): Now, Doctor, assuming all of the same facts; do you have a medical opinion as to whether Mr. Lyons suffered from any aortic insufficiency? A. I do have an opinion.

Q. And what is that opinion?

A. That he did not have an aortic insufficiency.

Q. Will you give your reason? [226]

A. And my basis for that is the description of the aortic valve in the autopsy finding and the fact that certainly—at least one of the medical reports I read stated no murmurs and that the others in the course——

Q. Just a moment, Doctor, the one that you read that showed no murmurs is not in evidence, and you cannot consider it. A. All right.

Q. Now, then, may I reask the question as to whether or not, considering those reports and bearing in mind your own observation of them, and all the other testimony about Mr. Lyons' activity, your examination of him under the fishing, and all of the other evidence you have heard here concerning the life and the work he did and the clinical record, disregarding any opinions of any other medical ex-

(Testimony of Dr. Francis Chamberlain.)

perts, do you have an opinion as to whether he suffered from any aortic insufficiency?

A. I don't believe he did.

Q. Now, is it a fact or in that opinion—no—pardon me, strike that. Will you state your reasons for that conclusion in detail, Doctor, limiting it to what is in the record?

A. My belief for that is that aortic insufficiency of sufficient degree to cause a patient's death is caused by two main conditions. One, syphilitic disease of the aortic and the second, rheumatic heart disease, and the description of the autopsy report does not suggest either of those two conditions.

Mr. Mize: Your Honor, I move that the answer of the Doctor to the last two questions be stricken. I object to the questions on the ground that they are assuming facts some of which are not at issue. As a matter of fact we don't know what facts this Doctor is basing his opinion on and we have—just a minute, Mr. Beebe—and secondly incorporated into the question propounded by Mr. Beebe and the Doctor's own response, his opinion was based among other things on the findings of others and I think that it is not a proper hypothetical question, either one of the last two questions, and I believe that they are improperly stated and contain facts which are assumed by the Doctor and which are not in evidence and move that the answers be stricken.

The Court: The objection is overruled and the motion denied.

Q. (By Mr. Beebe): Have you finished your

(Testimony of Dr. Francis Chamberlain.)

answer, Doctor?

A. I think so.

Q. Now, I want to return to the question of shock. Now, in the state of shock, if the amount of blood which comes back to the heart is reduced, would that cause an undernourishment of the heart muscle?

A. Yes, sir.

Q. In your opinion?

A. Yes, sir. If it's reduced in considerable degree?

Q. Yes. [228]

A. Yes, sir.

Q. And the degree of undernourishment of the heart would depend upon the degree of shock and the degree the flow of blood was reduced; is that correct?

A. Yes.

Q. Now, Doctor, in your opinion, if Mr. Lyons had died from a sudden or acute aortic insufficiency, would it have been evidenced on autopsy by a dilation of the aortic ring?

A. It would have, if the etiology had been syphilis. By the aortic ring, I assume you mean to be the base of the aortic valve on which the valve itself is seated?

Q. Yes, I mean that, or I mean would they have found dilation of the aortic valves themselves?

A. If he had died from—if the aortic insufficiency had been due to rheumatic heart disease, the aortic valve, not the base but the aortic valve itself, would have been seen to be dilated or what actually—I should say that the leaflets are fused and sealed together so that it can't close. That is obvious to the pathologist when he examines the heart valve.

(Testimony of Dr. Francis Chamberlain.)

Either of those two—either the plastered valve leaflets you might say, or the rheumatic heart disease cause dilation of the aortic, of holding the edges of its leaflets, of the aortic, apart—either of those two conditions would be seen in an autopsy of a person who died from aortic insufficiency. [229]

Q. Well, were the leaflets that you have described the same as leaflets that has some atheromatic deposits on it? A. No, sir.

Q. How did it differ?

A. There is an extensive degree of scarring which doesn't appear to be the atheromatous plaques. They open and then this atheromatous plating like material—these are scars and distortions—I should say scarring, twisting, distortion of the valve proper and especially the edges of the valve.

Q. Now, Doctor, considering all the testimony concerning Mr. Lyons, and again excluding all the opinions of others and limiting it to the facts in the medical record and the testimony you have heard, and what you have observed; the factual testimony you have given yourself; do you have an opinion as to the condition of Mr. Lyons' heart prior to the fatal occurrence on February 10, 1953?

Mr. Kriesien: If the Court please, I object to the form of the hypothetical question again on the ground that counsel does not know what facts are being incorporated in the hypothetical question and upon which the doctor is predicating his opinion.

The Court: Overruled.



(Testimony of Dr. Francis Chamberlain.)

wonder if—you have answered the question already that I just asked—I wonder if you would explain it to the Court, the mechanism or physiology by which you—it is by which you believe the gunshot wound was the cause of Mr. Lyons' death.

The Court: He has already done that.

Mr. Beebe: Has he?

The Court: Yes.

Mr. Beebe: Except, your Honor, that the witness suggested that—did you get to finish your explanation of the mechanism or physiology of that, Dr. Chamberlain?

The Witness: I think there was one point that I didn't explain before the recess, and that was that this was the role of the shock in the production of the whole thing, that the shock resulted in the heart getting too little blood supply, less blood than usual, at the same time the situation which would prevail at the time a gun exploded, caused the heart's unusual demands. In other words, the heart suddenly speeded up, abruptly the blood pressure suddenly rises, the adrenalin poured out of the adrenal glands which causes an excess, a wasting actually of the oxygen which is already in the heart, so at the same time the shock, the associated shock and the associated emotional upset, there is a greater stimulation of the autonomic or automatic nerve system, so that the findings [233] or sum total of all of these things in addition mean that some nerve capable of starting the reflex nerve which goes from various parts of the body to the heart controlling its mechanism, in addition to the setting that off, a situation existed



(Testimony of Dr. Francis Chamberlain.)

wherein the heart gets less blood supply than usual and at the same time needs more.

Mr. Mize: Are you through, Doctor?

The Witness: Yes.

Mr. Mize: Your Honor, I move at this time for an objection to the last question and move that the answer be stricken on the ground heretofore stated by myself in connection with all of the questions propounded to this doctor and his answers in connection with his opinion as to the cause of this man's death.

The Court: Objection overruled. Motion to strike denied.

Q. (By Mr. Beebe): Now, Doctor, with the same assumption and with particular reference to the facts as shown by the autopsy, that Mr. Lyons had some atheromatic deposits—plaques in the coronary arteries and that the coronary arteries were diminished in caliber to some extent, because of that, under those circumstances how would the shock itself affect his heart functioning?

Mr. Kriesien: If the Court please, we object on the same grounds there is no evidence in this case that the shotgun preceded the heart attack. [234]

The Court: Overruled.

The Witness: Am I asked then to answer that question, the objection was overruled, Judge?

The Court: Yes, I overruled the objection to the answer and to the question.

Q. (By Mr. Beebe): In other words, what I am driving at is what part, if any, did the atheromatic

(Testimony of Dr. Francis Chamberlain.)

deposits in the coronary arteries play in bringing about the death, if any?

A. I don't feel that it necessarily plays any part. I think—I feel that these things could happen with or without atheromatous plaques.

Q. Now, Dr. Chamberlain, are there medical records or are there facts in the record which—from a medical standpoint, make it necessary that the shot-gun exploded prior to the onset of the fatal heart attack?

Mr. Kriesien: If the Court please, I object on the grounds and for the reason that that is not within the realm of opinion testimony that this witness is qualified for and fails to incorporate the facts upon which it attempts to predicate the opinion.

The Court: You are getting into the realm of conjecture with that question, and I am going to sustain the objection.

Mr. Beebe: I think, your Honor, at a convenient time we would like to make an offer of proof.

The Court: I don't want to hear any offer of proof. The [235] Court has ruled.

Mr. Beebe: Thank you.

Q. Doctor, with respect to the testimony that Mr. Lyons was pulseless when Dr. Rush got to him, did that have any significance in connection with the pulselessness, but with still some heart activity, does that have some significance in connection with that autopsy finding of—no, correction—for the autopsy finding, does that have any significance in connection with passive congestion and pulmonary edema?

(Testimony of Dr. Francis Chamberlain.)

Mr. Kriesien: If the Court please, I will object to that question, as the question is confusing, and move that it be stricken.

The Court: There was some testimony that there was a murmuring; if that may be deemed as activity I will allow the question.

The Witness: I am sorry again, sir, would you repeat the question?

(Question read.)

Mr. Beebe: Let me amend that.

The Court: I don't think you had better amend it, I think you had better start all over.

Q. (By Mr. Beebe): Thank you, your Honor, I am sorry.

Now, Doctor, would the fact that a man was pulseless and yet had some heart action have any significance in bringing about pulmonary edema or an enlarged liver as was found [236] in this case?

Mr. Kriesien: Same objection.

The Court: Overruled.

The Witness: Yes, I think it's quite important.

Q. (By Mr. Beebe): And what is the importance of it, what is the significance?

A. The answer is that I believe as I stated before that sudden death, that sudden standstill of a heart, for example, doesn't result in evidence of congestion in the liver. Sudden standstill does not result in evidence of congestion of the liver or evidence of congestion in the lungs such as was described here. That

(Testimony of Dr. Francis Chamberlain.)

sort of thing takes minutes of life and blood flow for a period of at least a few minutes.

Q. Now then, Doctor, was the existence of pulmonary edema and enlargement of the liver significant in this case?

A. Those are the evidences which were described by the autopsy and the other evidences for pulmonary edema were described by Dr. Rush, with foam which was first frothy and then pink frothy, and after two or three minutes after the stertorous breathing was observed.

Q. Well, was that fact of significance in this case in connection with your opinion?

A. Yes, I think so. I think that is one of the bits of evidence to suggest, that also tended to support the concept of this man's heart continuing to beat, not effectively enough [237] to produce a pulse, but there was some continued heart action for some time following death.

Q. And, Doctor, would the autopsy report—it shows the presence of two bile stones, one, one centimeter in diameter and the other, three millimeters in diameter. The large stone being at the union of the cystic duct and the common duct. Does that finding on autopsy have any significance in this case with respect to the cause of death?

A. I don't believe so.

Q. Now, Doctor, would you give the reason for that, please?

A. Yes. There is some animal work primarily



(Testimony of Dr. Francis Chamberlain.)

showing that there were some reflex pathways between the gallbladder and that part of the digestive tract, and it stops circulation, so that it has been shown, for example, that in dogs that have coronary disease, not normal dogs, but dogs which have been made to have coronary disease artificially, that if the gallbladder is dilated, is blown up with a balloon, for example, the electrocardiogram will look worn and scored. And there are occasional reports in humans who, in the presence of coronary disease, and with occasional cases the heart pain may get better, if the gallstones are removed. On the other hand, I know of no place in the literature and certainly none from my own experience where I felt that a gallbladder attack would result in the death.

Q. When you were with Mr. Lyons, did you observe any symptoms of [238] gall bladder sickness or gall bladder attack? A. No, sir.

Q. Now, Doctor, in the autopsy report there was some evidence, you probably recall it better than I do, about adhesions to the diaphragm and some attachment of the pericardium to the chest wall; some fusion of the lungs with adhesions. Were those of significance in the cause of Mr. Lyons' death in any way? A. I don't believe they were.

Q. Assume that this man had a severe chest injury with a pneumo-hemothorax, and what would your opinion be with respect to the cause of these adhesions from some crushed ribs?

A. The most likely thing would most certainly



(Testimony of Dr. Francis Chamberlain.)

be the adhesion of the pericardium due to trauma at the time of the injury.

Q. You may cross-examine, Mr. Kriesien.

### Cross-Examination

By Mr. Kriesien:

Q. Dr. Chamberlain, your own personal observation of Mr. Lyons was during the few days that you were together prior to his death; is that right?

A. Yes, sir.

Q. And were you observing him from a standpoint of a doctor or were you just around about as friends?

A. Certainly as friends rather than as a doctor.

Q. I mean, you were not paying too much attention to his [239] physical condition; were you, Doctor?

A. We were—it's unusual to have four men—five men closely associated for a period of several days, so I was unusually close, I was in close contact with him certainly, I should say more so than just as a casual one.

Q. Doctor, in your opinion in testifying about the aortic insufficiency, you continually referred to the fact that no heart murmur was detected and there was evidence to that effect in the medical case history files, can you tell me where it is revealed in the files?

A. I went through the affair, and I thought that I saw some letter, I thought that I had where it was

(Testimony of Dr. Francis Chamberlain.)

stated that there were no murmurs. I think that there was some evidence that I heard today about no murmurs and that was Dr. McKeown was the family doctor who had examined Mr. Lyons for a big insurance policy and subsequently at various intervals stated in this room this morning that there were no murmurs.

Q. I believe that was back in 1950, Doctor, about the last time, and you were asked not to predicate your opinion on the opinions of others. You were putting the basis of your entire opinion upon clinical findings that the man did not have a heart murmur.

A. May—I don't believe Dr. McKeown stated that he looked for heart murmurs in 1950, that he continued examining the man for five years, and if you say the opinion that you asked [240] for—well, it is not my province to argue, I am sorry.

Q. All right. Well then, that would be his opinion whether there was a heart murmur or whether or not there was not; is not that correct, Doctor?

A. Dr. McKeown's?

Q. And that, Doctor, would be nobody else's, that would be his opinion? A. Yes, it would.

Q. Can you point out where in the record there is any clinical record that Mr. Lyons did or did not have a heart murmur? Not the opinion of the party?

A. You mean in the written record?

Q. That is correct, the record that is in the exhibits in this case.

A. Well, I am not sure that there is some specific

(Testimony of Dr. Francis Chamberlain.)

reference to no murmurs other than in that one single letter or whatever it was that I saw, but I don't remember the exact wording, but I think that the physical examination was negative or something of that sort, as I recall the man was examined because of chest pain, which might—I mean with the thought that this might come from his heart by two examiners and in their notes it would be the custom, certainly, if you found a hell-roaring murmur such as you would expect with aortic insufficiency, to mention it.

Q. But then again, that is a matter of opinion of the doctors? [241]

A. It's customary for all doctors to write down major physical findings on physical examination, and a murmur is a very important finding.

Q. Is any such a finding written in any of the record here? A. That there was a murmur?

Q. Or, that there was not a murmur?

A. Well, I—apparently not.

Q. All right. Now, let's remove from your opinion the item of any evidence, either that there was or there was not a heart murmur, then, basing your opinion upon the data, information contained in the autopsy report, can you say that the man did not suffer from an aortic insufficiency?

A. I would.

Mr. Maguire: I suggest, your Honor, counsel has either misconceived or has not indicated it right, a man has a heart murmur, it's not a question of a physical finding, it is a question of hearing. You can

(Testimony of Dr. Francis Chamberlain.)

say I look at this wall, your Honor, is back of the bench—that I see you there and I hear you speak, and that is my—and not my opinion, it is a sound that I hear. I think it is not quite fair to the witness.

The Court: Is the matter of existence or non-existence of a heart murmur, is that a matter of opinion, it is a matter of objective physical finding. Well, you pursue that line of examination. [242]

The Witness: I'd say in answer to your question, on the basis of the autopsy material alone, I do not believe this man had aortic insufficiency.

Q. (By Mr. Kriesien): All right. Now what did the autopsy report say, Dr. Chamberlain?

A. Or, may I say, because without high blood pressure—your information whether he had high blood pressure or not, I mentioned that several per cent or so of the patients who have hypertensiveness, have slight, relatively unimportant degrees. To be fair, I can't rule that out. But I can say on the basis of the autopsy findings alone, I can feel certain that there was no physiologically important degree of aortic insufficiency, yes.

Q. Now, the wording of the autopsy report is, I am reading from your exhibit, "A thickening and stiffening of the aortical sigmoid aortic semilunar valves. With atheromatic deposits." Now, this report does not indicate the degree to which the valve was thickened or stiffened? A. That's right.

Q. All right. Now, if it was thickened considerably and stiffened considerably, then would it be a cause of aortic insufficiency?



(Testimony of Dr. Francis Chamberlain.)

A. No, because the deformity of this valve which would have to cause this patient to have aortic insufficiency would be stiffening plus it would be narrowing, scarring, distortions [243] characteristic of rheumatic heart disease. There is more rheumatic heart disease in Mexico City, certainly, than we have in our country, so that the Mexicans have an unusual experience with rheumatic heart disease, and I would like to say that I have looked at some hearts in which the valve is scarred from rheumatic heart disease.

Q. All right, Doctor. Now, you say they have had considerable experience with rheumatic heart disease. And it has been determined previously, and they give as a first cause of death, aortic insufficiency—the direct cause of death. Now, Doctor, from their experience with that disease, would they not be in a better position than you, from the meager findings of this autopsy report, to arrive at a conclusion as to the direct cause of death?

A. I am not sure, because I think this certainly, that these were two country doctors. Two young country doctors. Dr. Serrano who told me they didn't do many autopsies. Theirs were supervised experiences in the field. I wouldn't expect to see the garden variety of findings, but to look at an autopsy and have a lot of physiological concepts on which to base a valid—or to have an opinion such as a pathologist, such as Dr. Lehman, it is an altogether different situation.

Q. Dr. Chamberlain, that was not an answer to



(Testimony of Dr. Francis Chamberlain.)

my question. My question was: Was this experience that you have talked about with the Mexicans, and having observed the conditions of the aortic valve, would they be in a better position to [244] arrive at a conclusion that the man's direct cause of death was an aortic insufficiency, rather than yourself, who have examined this autopsy report?

A. I don't think they necessarily would, because I consider myself an expert in the cardiology field and I think I know a good deal more about this than they do. Probably about—I would doubt for instance if you went to the average student, perhaps, and asked him about the causes of aortic insufficiency, how many of them could give you as correct an answer as I think I can, because I am teaching that sort of thing constantly. I am not sure they could see more in that autopsy and make an opinion on a technical point like that, than I am able to.

Q. All right. Let's talk about the coronary arteries. You state that you feel that they didn't necessarily play any part in the death of Mr. Lyons; is that correct? A. Yes.

Q. Now, upon what do you base that opinion, and I mean clinical findings, Doctor?

A. Clinical findings?

Q. Yes, as contained in the Mexican autopsy report.

Mr. Maguire: If your Honor please, I think that there is improper cross-examination in that the doctor's opinion was based upon the history of Mr. Lyons and upon a great many other things in addi-

(Testimony of Dr. Francis Chamberlain.)

tion to the autopsy report. I think [245] the question is unfair.

The Court: Overruled.

The Witness: Now, you say the clinical findings on the basis of an autopsy report, you don't call an autopsy clinical findings, you mean based on the autopsy findings?

Q. (By Mr. Kriesien): I will read it to you.

A. Yes.

Q. The autopsy findings were, the coronary arteries were dissected and were found to be reduced in caliber from atheromatic deposits. Now, you state that you don't feel that the condition of the coronary arteries necessarily played any part in this occurrence? A. That's right.

Q. Now, do you know to what extent the coronaries were diminished? A. No, sir.

Q. In caliber?

A. No, and that's why I said I don't think that it necessarily played any part. I think you can say this, from the autopsy report, this, they were not completely plugged, that they were reduced in caliber, which gives you a tremendous leeway, doesn't it? That would be anything from a very infinitesimal amount in the reduction in caliber to a very severe amount, but there is nothing there to state that there is a severe degree. There is nothing there to state that there is any [246] arteriosclerosis that a man 49 years of age could have.

Q. It doesn't say there wasn't a great deal more?

A. It doesn't say there wasn't.

(Testimony of Dr. Francis Chamberlain.)

Q. Now, as I understand, a complete blockage of the coronary arteries is an occlusion?

A. What is that, sir?

Q. Complete blockage is an occlusion?

A. Yes.

Q. Rather than a coronary insufficiency?

A. Now, I don't follow your latter part of that question, but a coronary insufficiency—should I rave on?

Q. Go ahead.

A. By coronary insufficiency, we mean impairment of the blood supply to the coronary to the point where the blood flow is insufficient to carry on the proper working of the heart.

Now, that may be a narrowing, as I pointed out in my other testimony, is where the coronaries are so impaired by the atheromatous deposits so as to produce important coronary pain, or as to produce a cardiac infarct, that there were at least two major branches which are completely occluded and often three, and sometimes more, and that is the fact which has revised some of the older thinking by—and I think you will find all pathologists now agree with, that was the sort of thing that was described.

Q. It is not described in the autopsy? [247]

A. In the autopsy.

Q. All right. But now, the doctor concluded that the secondary cause of death was coronary atheromatic deposits, coronary insufficiency, then to congestion of the lungs and the liver. Now, I will ask you again whether your not having observed the

(Testimony of Dr. Francis Chamberlain.)

coronary arteries of Mr. Lyons, whether the Mexican doctor was in a better position to render an opinion as to whether the man died of a coronary insufficiency as a result of the diminished caliber of the arteries?

A. No; I don't think the pathologist is. One can have considerable degrees of normal closing of the coronary vessels, some of them even close in some individuals who lead very long lives and carry on strenuous exercise, and have no symptoms or signs of coronary disease whatsoever, so that the physiological concept of what man can do and the analysis of the steps that brought about his death, I think—and watching him exercise, and all of these other things, I think gives the person a better idea of what the coronary vessels do than some amateur pathologist who is looking for foul play, and conducts an autopsy. He is looking at it from a different standpoint, and he doesn't have these facts.

Q. Dr. Rush had the same background; did he not? A. Yes, sir.

Q. I believe Dr. Rush, in the affidavit he submitted in support of the plaintiff's proof of death of James A. Lyons— [248] have you ever seen that affidavit? A. I don't think so.

Q. All right. I will ask you this question. From the findings contained in the Mexican autopsy report, would you say that Mr. Lyons had a disease of coronary arteries?

A. This depends on what one's concept of disease



(Testimony of Dr. Francis Chamberlain.)

is. You say that a person who has gray hair is diseased, whether you will say it is the usual evidence of aging, the average evidence of aging for a man of a given age group, if you want to call that as disease or not, I am not sure. I'd say certainly, he had—he didn't have the coronary vessels that he had when he was born, but from the evidence presented, I don't think it—there is any evidence presented that his coronary vessels were bad any more than a man of 49, because apparently all men of 49 have atheromatous deposits.

Q. But the evidence on that is negative, because the autopsy report doesn't state how much there was of the artery diminished; is that correct?

A. That's true. The autopsy doesn't show that. That is, I'd say negative, I'd say it is nebulous.

Q. All right. You, as a doctor, speaking medically, if the condition of the coronary arteries was the same as that that would be found in a man in the age category of Mr. Lyons, if you were diagnosing that condition, would you call it disease or would you say that the man has a usual amount of coronary [249] deposits for a man of his age category?

A. Well, I am not sure, that is, I think you could refer to it either as a disease or you could refer to it as the usual amount of aging process. I think again, that a lot of this diminishment, even down to where there is any derangement, any departure from norm particularly you could call a disease, I don't think it is proper to make a person determine



(Testimony of Dr. Francis Chamberlain.)

it as a disease or not disease. Sure, he had some evidence of aging, and I don't think it makes much difference whether you want to call it disease, some might, or evidence of normal aging.

Q. Well, would you call it disease?

A. Not necessarily. I think—well, I think it's a debatable point. I think you could call it either a disease or you could call it the normal aging. I think it's—it depends on one's philosophy of it. I'd say it's not a departure from the norm, and some would call a disease a departure from the norm. And if one uses that concept, which my understanding of—well, I will not embark on that.

The Court: How long are you going to be, counsel?

Mr. Kriesien: Quite a while, your Honor.

The Court: We will have to adjourn then until Monday.

The Court will stand adjourned until Monday morning at 9:30.

(Whereupon, an adjournment was [250] taken.)

(Pursuant to adjournment on November 23, 1955, proceedings were resumed at 9:30 o'clock a.m. Monday, November 28, 1955.)

The Court: Are you ready to proceed?

Mr. Kriesien: Ready to proceed, your Honor. I believe Dr. Chamberlain was on the stand.

The Court: Doctor, will you take the stand, please?

DR. FRANCIS CHAMBERLAIN

resumed the stand as a witness on behalf of the plaintiff, and having been previously duly sworn, testified further as follows:

Cross-Examination

(Continued)

By Mr. Kriesien:

Q. Doctor, prior to our adjournment for Thanksgiving holiday, I do not know whether I asked you this question. If I am repeating myself, I am sure the Court will overlook it, but I believe it was your testimony that Mr. Lyons' diminishment of the caliber of the coronary arteries was no different than that of a man in the same age range; is that correct?

A. I believe I said, not necessarily different.

Q. I see, but you remember testifying that his coronary arteries were or were not in the same condition as a man in the same age range?

A. We can't be entirely sure by the autopsy statement just [251] how much narrowing of the caliber of the coronary was. He said that the caliber was diminished, and generally, when—you people, I know went down and talked to the doctor again a few months later, and he was asked the same question and he said it was impossible to state, and it's my feeling that if there is a sufficient degree of coronary artery narrowing to be important enough to produce sudden death or to produce clinical manifestations such as true coronary pain, that there are some coronaries, very many, some major coronary

(Testimony of Dr. Francis Chamberlain.)

branches which are completely closed, and that also was not described.

Q. Do I understand, Doctor, that you must have a complete closure of the coronary arteries or one of them to have a coronary insufficiency?

A. One of the major branches. It's been shown by Slessenger and Bloomgard, and revolutionized our thinking some 10 or 20 years ago, as has been shown in the major textbooks, that before a patient gets clinical evidence of coronary disease—in other words, where he gets heart pain during—major true heart pain during, not two hours later, but during the peak of strenuous physical exercise, that he has at least two and often three major branches of the coronary circuit completely blocked, and when he gets sufficient narrowing of the coronary arteries to get myocardial infarction, where some of the heart muscle is suddenly completely deprived of its circulation, that there are two or three and often four major branches [252] of the coronary vessels that are completely plugged.

Q. The autopsy report does not show one iota in that respect; does it?

A. Well, the autopsy mentioned that the caliber was narrowed, but it didn't say that there was closure.

Q. Now, is coronary insufficiency an accepted cause, medically, of a hypertrophy of the left ventricle?      A. No.

Q. It's not. And what about an aortic insuffi-

(Testimony of Dr. Francis Chamberlain.)

ciency; is that an accepted cause, medically, of a slight hypertrophy of the left ventricle?

A. Yes; it is.

Q. Can an aortic insufficiency be diagnosed in a person by merely being with them, seeing them exercise and sitting across the table from them?

A. Well, it usually can; yes. These things, of course, are a matter of degree, but usually the coronaries, coronary insufficiency, I should say, is apt to come out if one produces it artificially, it is apt to come out under circumstances of maximum heart load, peak heart load. In other words, it doesn't come when a person is sitting, or on the other hand, a heart that is physically tired or initially tired, it comes when he is carrying on the peak of physical exertion, and the way we usually demonstrate it, the way we bring it out, is by having a patient deliberately exercise, and sometimes we [235] go out and you can walk up and down the stairs with him a bit to see if he develops a pleural pain.

Q. Well, Doctor, aren't there any other precipitating forms of a coronary insufficiency, other than exertion?

A. Yes; I think anything that could bring out a peak heart load could produce.

Q. Could emotional factors precipitate coronary insufficiency?

A. Usually an emotional factor will not precipitate it nearly as readily as physical exertion will. As a matter of fact, at the university we used a cap pistol in the course of our taking an electrocardio-



(Testimony of Dr. Francis Chamberlain.)

gram, at the University of California electrocardiology department when I was there, and in the course of taking the examination we shot a cap pistol off and said, "Oh, my," as though the machine had broken, to see if we could produce electrocardiographic changes, and the chance of producing the changes like that, from some sort of a fright, was very exceptional that we could; however, whereas in a patient who had a sufficient narrowing of the coronary arteries demonstrable clinically, we could produce electrocardiographic abnormalities in the course of the strenuous exercise in about half of the patients that we thought truly had the coronary disease of this particular group. This particular group I might say were one—where one has to use the exercise tests, in other words to produce electrocardiographic abnormalities represent usually an unintelligent group of patients who were represented especially [254] by some of our clinic patients with a lack of education, and so on, who haven't registered the fact that when we do something physically strenuous, that the pain comes on while they're climbing the mountain. during intercourse, and so on.

Q. But it is medically possible for an emotional factor such as this to precipitate a cause of acute coronary insufficiency?

A. It's possible, but I don't recall an instance offhand of any patient who had his coronary pain during the course of excitement, rather than exercise, unless there is something else physically which intervenes, such as hardening of the arteries or an



(Testimony of Dr. Francis Chamberlain.)

arthritic infirmity, or something of the sort. The first thing that happens the patient will tell you is pain that comes on on the peak of physical exertion.

Q. I will ask you whether or not a disturbance of rhythm of various parts or mechanisms of the heart can result in acute coronary insufficiency?

A. Yes, it can; and it can in even a younger perfectly normal individual.

Q. As a matter of fact, Doctor, anyone can, of a dynamic driving type can die of a heart attack; isn't that correct?

A. Well, a person—I think that—that's—that question is sort of how high is up. Anybody of any type can die of a heart attack.

Q. That is correct.

A. If you are referring to the predisposition of energetic or dynamic personality can have a coronary—is that what [255] you are after?

Q. Yes.

A. That there is a good deal of dispute in literature which comes up constantly as to whether the extra energy that a businessman shows with the driving type of executive, whether that is a predisposing factor of the development of coronary disease, and there are a great many conflicting bits of evidence in the literature, so we aren't certain about that. Statistically, the life insurance figures have shown that a bartender and a barber are more prone to develop coronary disease than the businessman, than the high-pressure executive, and it also, I think, is important to know that the high-tension

(Testimony of Dr. Francis Chamberlain.)

business executive, although he falls into a group where he is more apt to get coronary disease, than the laborer, for example, who works constantly with his muscles, and not with his brain for a living, although the executive has a little greater predisposition so that the life insurance companies who are gambling on whether a man will live, will rate him up high, for instance, more than it rates up the bartender and the barber, and for other certain groups and why, the medical profession doesn't understand. And one factor, and probably the most important factor is that high blood pressure is known to be predisposed to, in part, by high-tension work, and of these individuals, certainly a good many of these individuals have high blood pressure. Of the cardiac deaths [256] that we see of the 52 per cent of all the population, now, who are dying, who die of heart disease well over 50 per cent of those who die of heart disease are known to have high blood pressure, at least as part of the mechanism of the destruction of their heart, so that blood pressure is very important.

Q. It is a fact, medically, is it not, Doctor, that many times individuals suffer a heart attack when there is no clinical findings of any condition of the heart?

A. It depends again on what you call a heart attack. Now, if you call an abnormal rhythm of the heart a heart attack, the answer is yes. The answer is that a great many individuals—I myself have had

(Testimony of Dr. Francis Chamberlain.)

a rapid abnormal rhythm of the heart, and I don't know—in the general run of the population—but I would guess—about, I would guess about at least a quarter or probably more of all individuals have these episodes of sudden onset of a rapid abnormal heart rhythm at some time in the course of their lives.

Q. What is that tied in with, heart beat, Doctor?

A. Yes; it means that the heart rhythm becomes abnormal to the point where it beats anywhere between 50 and 100 which we consider as normal range for the heart, very suddenly will begin to develop this abnormal rhythm where it may beat anywhere from 130 up to 300, that is the ventricle, that beats 130 up to 300 and, of course, the milder degrees for [257] instance if a person gets a beat of 130 to 150, many of them don't even notice it, but if the rate happens to be unusually rapid, such as around 240 or 250, most individuals even though they have perfectly normal hearts, develop the pain symptoms under those circumstances of coronary insufficiency, and if it gets, if the ventricles get to the rate of about 230, the heart has so little time to fill between beats that there isn't sufficient blood to supply it, and so the patient has unconsciousness and he also is pulseless because there isn't sufficient output of the heart to make the heart-beat pulse felt at the wrist or capable of nourishing the brain, giving the brain tissues sufficient oxygenated blood to maintain consciousness.

(Testimony of Dr. Francis Chamberlain.)

Q. What about the pulse range of a hundred to 130; is that abnormal?

A. There are some individuals who have a heart rate from 100 to 130 without any disease whatsoever, and who have it as a result of nervousness alone. There are, we see some whose heart rate is also above 130, some patients who develop—I should say the commonest cause of a heart rate above a hundred has some factor outside the heart, overactive thyroid or some disease somewhere that the body or even a traumatic condition anywhere in the body under circumstances especially associated with fever, the average patient who has fever has a fast heart rate, and of course those patients with fever, [258] the fever doesn't have anything to do with their heart.

Q. Well, is it of any medical significance to you, Doctor, the fact that Mr. Lyons had a heart beat of say in excess of 110 over some continued period of time?

A. As I understand from my summary of the medical record, that occurred during the time when he had this trauma, when his lungs were filled—I mean the lungs adjacent to the hemothorax from having fractured ribs as I understand, those were the circumstances surrounding the period of time when he had the rapid rate. I should say that the two electrocardiographs which were just as good as my being able to take, the heart, in the one in 1950, and the one taken in the week or so before his death showed a normal heart rate.

Q. Now, Doctor, you gave as your opinion, I be-



(Testimony of Dr. Francis Chamberlain.)

lieve, to the effect that this nitroglycerin that was prescribed for Mr. Lyons on February 4, 1953, was not for a cardiac condition, angina pectoris or anything of that nature; is that correct?

A. I believe that it was—I believe that it was given as a diagnostic aid, since there might have been some uncertainty on the part of the doctor as to whether some of this pain represented coronary disease or whether the pain could have been the result of some digestive upset, such as gallstone or spasm of the lower end of the stomach, or the lower end of the esophagus, both of which occurs frequently in the course of fatigue, and my reason for that, I believe in some [259] of my testimony from last Wednesday, I said a little bit about that, you asked me about whether the record showed that there was any murmur or not, the testimony with which I had reference to was not admitted as evidence here, but I was a little bit confused, but I have since looked up the testimony and the things referred to——

Q. Just a moment, whose testimony have you looked up?

A. Dr. McBride's deposition, describing his examination of Mr. Lyons a week or so prior to his death. I refreshed myself about it over the week end and found that Dr. McBride, who specializes in internal medicine went through it, described it in a two- or three-page dissertation his examination of Mr. Lyons at that time, and the symptoms and what they meant to him. the physical findings and he—



(Testimony of Dr. Francis Chamberlain.)

although he didn't say specifically there were no murmurs he said there was no objective evidence of disease, and certainly a murmur is one of the very major—a murmur is the most—probably the most important objective evidence of disease that a doctor would look for in a heart study. That is the thing we look for in physical examinations, and physical examinations give us 35 per cent of the important tools with which we make a diagnosis, and he stated that there was no objective evidence, and he stated also that on a basis of his study which he described, and where the description sounds as though he had been thorough and had made exercise tolerance tests and so on, [260] that he felt that there was no disease. That Mr. Lyons was worn out, and that he needed this vacation. There was one other thing, I might mention about the nitroglycerin—or may I?

Q. Definitely. My question was about the nitroglycerin, Doctor.

A. Was that it seemed to me that Mr. Lyons was not convinced about the significance, about the importance of the nitroglycerin because of the fact, the whole one part of our whole trip where he had an opportunity to exercise, where we were going shooting, namely the only time we left the ship, I think that was the only time in the whole—from the time we boarded the ship, the first time we left it was when we went on this hunting trip, I myself was there when his body and his pockets and so on were completely searched. He did not take the nitroglycerin with him on this hunting trip.

(Testimony of Dr. Francis Chamberlain.)

Q. Now, Doctor, did you locate the nitroglycerin tablets? A. No; I didn't.

Q. Did you make a search for them?

A. No; but I know where they were. As a matter of fact the nitroglycerin, I heard——

Q. Not about what you heard, I am asking you what you know.

A. Well, this—Mrs. Lyons had sent his wallet, and the nitroglycerin tablets were in his wallet.

Q. He did not have his wallet with him? [261]

A. He went off—he didn't have his wallet with him when we went hunting.

Q. Now, on the nitroglycerin, you said in your opinion it was used for a diagnostic aid?

A. I didn't say it was, I said it is frequently used, and that it's my impression after, especially after seeing Dr. McBride's record of what he thought, that it was used as a diagnostic aid. It was either used as a diagnostic aid—I think I mentioned that one can never completely rule out the possibility of coronary disease, that he probably used it under those circumstances. The other thing about that, one of the things we do for a patient is not necessarily diagnosis, but it is given for a patient for relief, and if he gets relief from indigestion by using it, well what is the harm, let him use it for that. We are unwise not to use them like that.

Q. Doctor, I believe the medical case history file of Dr. McBride reveals that on February 3, 1953, the man had constricting chest pains with arm radiation. On February 4th, he had constricting chest pains

(Testimony of Dr. Francis Chamberlain.)

with arm radiation and that nitroglycerin was prescribed, and that on February 5, 1953, the pain had some diminished or improved. Would that be of any significance to you after the nitroglycerin had been prescribed?

A. No; I don't think so, because if the nitroglycerin helps [262] coronary pain, it helps the type of coronary pain usually that comes on during strenuous effort, and it helps immediately. That's hence the diagnostic, see, it helps it immediately so that within a minute or so the pain is completely gone. It doesn't prevent the next pain that should come along under some further strenuous physical exercise. It gives systematic help and shortens the attack, but it comes back later, and has none—I'd say no, the patient that is intelligent, and is having frequent attacks of coronary, will come back and say that medicine is wonderful, I took it and the pain disappeared just like that.

Q. Yes, Doctor; but we have here a man who came back on February 5th, and he says the pain is some improved.

A. He doesn't say the pain disappeared or was shortened. If a person gets a heart attack the individual attack is very short, but he just has it a short time.

Q. Well, aren't we playing on words that were used by Dr. Wilson in describing the effect of the nitroglycerin—Dr. McBride, rather, pardon me?

A. I don't think so.

Mr. Beebe: If the Court please, that is a foolish question and is not proving the medical opinion as

(Testimony of Dr. Francis Chamberlain.)

to whether or not the patient having nitroglycerin had anything to do with it, it is simply the statement that the patient said that the pain had improved some. [263]

The Witness: I think this isn't—wasn't a heart pain at all, and that life is beautiful since you gave me that medicine. If nitroglycerin helps the coronary pain, the patient says I still get the pains but when I take the nitroglycerin, it disappears in one minute instead of five minutes. That's the difference that nitroglycerin makes in coronary attacks.

Q. (By Mr. Kriesien): Now, Doctor, I believe you also stated that this remark about Thaverine, that was some type of pill, I forgot what you described it as——

A. I thought it was some kind of a vitamin, I am not sure. It's not known to me.

Q. If it is established that that is a pill for a heart condition, would that alter your opinion as to what the nature of the attack was in February of 1953?      A. No; I don't think so.

The Court: What was that word you used?

Mr. Kriesien: Thaverine.

The Court: I have never heard of it.

The Witness: I think that a great many physicians have a tendency when a patient comes in, to give him something, and I think that if this were a major form of treatment known to help heart disease, that I would probably have heard of it, because I pride myself on keeping pretty well up to date on these things.



(Testimony of Dr. Francis Chamberlain.)

Q. (By Mr. Kriesien): Now, Doctor, isn't it medically [264] accepted that when an individual has constricting chest pain and radiation down the arms that such an individual is to be considered as having angina pectoris, unless it is proven otherwise?

A. Yes, sir; I think one could say that with some qualification, I could say not, because it is the commonest type, the commonest cause of constricting pain in the chest, but because coronary disease is a very important disease it is like saying look at all the snakes, it looks like one of them may be a rattler, but few of them are.

Q. Well, now, with fatigue pain from emotional overwork or from exercises; is that as you have described in the chest region, is that of a constricting nature?

A. It may be. It's a varied type. Sometimes it is an ache and sometimes it is a burning and sometimes it is constricting. It varies a great deal.

Q. And which is the most probable?

A. I think the commonest single pattern is an aching type of pain.

Q. Now, can a man who has a condition of angina pectoris do exercise without showing any loss of breath?

A. Again, it's a matter of degree. The usual symptom associated with coronary heart disease is not breathlessness, but most commonly pain comes before breathlessness occurs.

Q. I see. Doctor, isn't it medically accepted that



(Testimony of Dr. Francis Chamberlain.)

death [265] may occur from ventricular fibrillation where a patient merely has mild symptoms of angina pectoris?

A. Well, death can occur from ventricular fibrillation whether the patient has mild symptoms or whether he has severe symptoms or whether he has had no symptoms. One patient that I recall had a ventricular fibrillation with never any evidence of coronary disease. This man happened to have this electrocardiogram taken, which is part of my teaching collection of electrocardiograms and that man subsequently swam half way across the bay when his condition was corrected, and I think, as a matter of fact, that electrocardiogram of that individual is in court. I think Dr. Rush has that, if the Court wishes to see it.

Q. Well now, angina pectoris is a degree of heart disease; is it not, Doctor?      A. Is what?

Q. Is a degree of heart disease?

A. It's a symptom of heart disease. It's the pain which is produced when a heart doesn't get enough blood to do its proper job. It's a symptom.

Q. Can you state, Doctor, from anything that you know in this case, that Dr. Lyons did not have an attack of angina pectoris prior to the infliction of the superficial injuries to the face?

A. I think that the evidence is strongly against the fact [266] that he could have had. I think there are many, many things that we have been discussing, the medical examination ahead of time, our accompanying him when he climbed the sand hills,

(Testimony of Dr. Francis Chamberlain.)

and watching him, and being right present in our small world, which a ship with six men on constitutes, when he did this terrific feat of handling a 200-pound or so marlin, I think that the fact that his wife, who lived close to him never saw him under any circumstances when he showed that he had any sign of pain, or took a nitroglycerin pill, and so on. I think all of those evidences—I can't say he absolutely did not have, or that he hadn't had, but certainly there is no evidence that would make me feel that he had, and I think that considering all those bits of evidence, I would say that it is my belief that he did not have angina pectoris.

Q. The same would be true of an attack of coronary insufficiency, Doctor?

A. Angina pectoris is a symptom associated with coronary insufficiency. In other words, when coronary insufficiency—it's actually marked so, and the heart muscle doesn't get a proper amount of blood for this transient pain which we call angina pectoris.

Q. Now, Doctor, what are the main precipitating causes of ventricular fibrillation?

A. Well, we don't know a great deal about the major precipitating causes, for one reason ventricular fibrillation is usually [267] fatal, and ventricular fibrillation therefore is suddenly fatal, and most patients don't die when a doctor is as close—for example, as Dr. Rush was to Mr. Lyons, so that although ventricular fibrillation is considered to be a

(Testimony of Dr. Francis Chamberlain.)

rather common cause of death, our information on that point is pretty sketchy, and I would say that the precipitating factors may occur wherein provocation—for instance, patients who are known to have ventricular fibrillation and died while an electrocardiogram has been taken, that is where those of an hour or more, and they die while electrocardiograms are being taken, and the rhythm taken upon a ventricular fibrillation has been shown to have been provoked by any of the factors which can produce any of the abnormal heart rhythms from anything which would act as a stimulant to the nerve system, major stimulant; fright, shock, collapse of the blood vessels or collapse of the circulation to the point where a person gets shock even from severe infection such as severe pneumonia has been shown to produce death by the mechanism of ventricular fibrillation.

Q. Does focal heart damage produce ventricular fibrillation?      A. Yes; I believe it does.

Q. That would also fall in the term “focal heart disease”?

A. Yes; and it may be precipitated by an underlying extraneous precipitating cause—underlying, there may be underlying heart disease of a coronary nature which is probably a predisposing factor in any given case, or which may be a [268] precipitating factor in any case.

Q. And coronary insufficiency may be one of those precipitating factors; is that right?

A. Yes. I should say, that in patients who have

(Testimony of Dr. Francis Chamberlain.)

angina pectoris—a percentage of them who die suddenly, that it is felt that ventricular fibrillation may be a factor, may be a *modus operandi*.

Q. Doctor, in answer to a question as to your opinion as to the cause of death we are speaking of, were you speaking of medical shock or a shocking experience?

A. Well, I was speaking of medical shock, and, of course, a shocking experience is one of the predisposing factors of medical shock. Now, I was speaking of medical shock where, due to this beginning of circumstances and mechanisms, I described the other day, the blood pressure falls and the blood pressure stagnates in the present great reservoirs in the digestive tract, and the little, tiny vessels throughout the body, at the same time part of the fluid, part of the blood, exudes through the little, tiny capillary walls so that some of the fluid in the blood leaves the circulating blood, so that the whole sum and substance of this—so that the amount of blood in the active circulation—the blood going through the stream—in other words, through the main vascular stream decreases markedly in amount.

Q. Does that result in ventricular [269] fibrillation?

A. And that whole condition is called medical shock, and I might say that there is still a great deal of research going on on this thing, and that all the mechanisms and all facets of what constitutes it and what causes it I have never completely understood, but I have mentioned some of the factors



(Testimony of Dr. Francis Chamberlain.)

which are generally accepted as contributing to the picture.

Q. Then the decrease in blood pressure results from ventricular fibrillation; is that correct, Doctor?

A. The decrease in the amount of blood which comes to the heart can be one of the major factors and I won't say that produces ventricular fibrillation, because you can get ventricular fibrillation produced without any previous shock at all, but shock is one of the predisposing factors. A simple virus in fact, or influenza, I have seen ventricular fibrillation, I have seen it happen from a medicine, like quinidine where the patient has had to take quinidine, and it would produce ventricular fibrillation without any shock at all, but a shock is a factor, and I think that there were several things in this situation which could have produced ventricular fibrillation—or it doesn't necessarily have to be ventricular fibrillation. The rhythm that I believe was present here, was of a very rapid, ineffective rhythm, judging by the fact that this man was pulseless, that he breathed a much longer time than is present in the usual death, and judged by the fact [270] that Dr. Rush, who got there probably very quickly had his hand on his chest and felt this purring sensation, all of which are unusual, so that to me, he could have had one of the number of abnormal heart rhythms, like an auricular tachycardia; it is usually a very benign situation unless the rate is very rapid, that happens to be the kind which my wife gets when she jumps into cold water. If it occurs at the rate of



(Testimony of Dr. Francis Chamberlain.)

300 beats a minute, or if it occurs at the rate of 130, it is just a damn nuisance, and it is just an auricular flutter in which the ventricles may beat 300 a minute. There are occasionally patients that have those auricular fibrillations. And ventricular fibrillation is a tachycardia where the rate is around 300, where the rate is so rapid that unconsciousness—and this scheme of events—I think all one can conclude from the evidence here is that it points to the fact that there was a very rapid abnormal rhythm, and ventricular fibrillation is certainly one possibility, and we think of ventricular fibrillation because after all the man died, and I think more people have happened to be having electrocardiograms taken during sudden death when ventricular fibrillation was shown than when some of these other rhythms were shown.

Q. Doctor, when you have a ventricular tachycardia, is there a pulse?

A. There is not a pulse perceptible at the wrist, if the rate—if the ventricular rate is rapid, depending on how [271] fast the rate is—the ventricular rate is as fast as 300 a minute, pulse and consciousness are usually present. If there is enough blood getting to the brain to maintain consciousness, one can usually—not invariably—but one can usually by very careful feeling find a pulse at the wrist, or I should say by expert feeling; that isn't always true.

Q. In ventricular flutter, do you feel the heart beat, or does he have a pulse, I should say?

A. No; ventricular flutter is a sort of disputed

(Testimony of Dr. Francis Chamberlain.)

rhythm, there are some that don't describe it, so I use the word for a regular ventricular rate in which the ventricles beat at a rate of about 300 and the auricles usually beat at the same rate, and that, by definition, is a rapid rhythm, so that if one subscribes, and I should say that about half of the authorities, that they are—that they believe that you should call it that, that is a technical term, and in dealing in terms one should call a ventricle flutter where the ventricle dominates the beat, and the rate is about 300. Some individuals will call that a rapid ventricular tachycardia; you asked what I would call a ventricular flutter, and I don't know which is the proper term. I use one one time and one the other, but we mean the same thing. The fact is that the body is the same, that the heart beats so rapidly that it can't do an effective job. The heart is— [272] the time between beats is so short that the heart can't fill up with blood, and even though it is a very good beat, the time is so short, so small, that the heart beats before it has enough blood to be able to propel enough of a jet or to reach the brain and effective vessels or to reach the wrist.

Q. Then, there would be a lack of blood pressure, as I understand it, Doctor; is that correct?

A. Yes.

Q. Now, is it possible to have a cardiac standstill that results from a ventricular fibrillation or a tachycardia?

A. Well, when the heart stands still, it stands still.

(Testimony of Dr. Francis Chamberlain.)

Q. We have a cardiac standstill for a short period of time, that affects you, but not sufficiently?

A. Yes, you have a cardiac standstill and then that may be followed by a series of other rhythms. It isn't usual, but it can happen. Most of the patients I have seen who have cardiac standstill—and again we have to have the electrocardiograph on them when that happens, and I would say that over 95 per cent of the patients that are on electrocardiograms that I have seen with cardiac standstill, don't ever develop any other abnormal rhythms.

Q. Doctor, with ventricular fibrillation, can you hear or feel the existence of that condition?

A. The only thing that you can feel is—there has been [273] described a purring sensation in the chest, which can be described with electrocardiograms first taken; Dr. Rush described a sort of a cat's purring sensation. They don't all have that, but they may have it, which purring sensation, I, myself, have felt.

Q. That would be an objective finding or demonstration of the ventricular fibrillation?

A. Or a rapid, ineffective—rapid, ineffective rhythm, because that same purring can be felt with any extremely rapid abnormal heart rhythm. It isn't specifically for ventricular fibrillation. I should say further, to elucidate this, that ventricular fibrillation is a sort of a chaotic situation from the standpoint of the rhythm, and it's quite mixed. The electrocardiographs will show that some of the beats according to the electrocardiogram appear

(Testimony of Dr. Francis Chamberlain.)

to be extremely ineffective, and the other beats are effective, so that it is a mixture. The heart being active with a very rapid beat, and sometimes it looks as though the heart did have a momentary stop and dropped three or four beats, and maybe it has a few beats when the heart did not reflect the electrical stimulations in the proper order, that sort of situation exists. In fact, the only sequence I have seen of electrocardiograms which show ventricular fibrillation suggests that that sort of thing is happening, there is some regularity, and there is rapidity and again you—you see, [274] in electrocardiograms all we are looking at is the example of the electrical current stimulating the heart. But actually, we are not a hundred per cent sure of how the heart responds, and so there is some guesswork in all this.

Q. Doctor, are not medical shock and congestive failure diametrically opposed to each other?

A. No, not necessarily. In heart failures there are two great theories of the mechanism of the heart failure. One is the forward failure and one is called the backward failure.

Now, it has generally acknowledged due to the work of Tensley Harrison some 20 years ago that heart failure did represent backward failure, and I am trying to simplify it, may I say, if a heart portion, like the left ventricle was unable to do its job, so that the blood was unable—the blood that was in the left ventricle was continually being poured out, and the blood through the veins,



(Testimony of Dr. Francis Chamberlain.)

and so that the blood backed up—piled up behind the heart, and produced engorgement of some of the lung vessels—some of the vessels, and if the engorgement was produced in the vessels of the lung, the person had heart failure, manifested by breathlessness and frothing of the mouth, and so on and so on. But it became obvious in the past 10 years with more study, that the thing was a simple one, the manifestations, one of the bits of evidence that made them realize this was probable was the mechanism of the death in shock, from patients [275] who died of infectious diseases, where, if infectious diseases might develop shock, and at the same time they developed manifestations of heart failure, and the theory then was reversed. In other words, if the heart didn't deliver enough blood to a certain organ to give it its proper oxygenation, in all probability there were certain things that occurred in that organ, one of which is the inability of the capillary to handle the—maintain the proper tone and to maintain their proper function, so that the liquid material from the blood can ooze out through those capillary walls, which may become porous, and so that even other situations where there is an inadequate amount of blood from the heart, that the situation—the clinical condition of congestive heart failure may develop, and that is—generally it's accepted. Now, when a person gets congestive heart failure, he may have backward heart failure or he may have forward heart failure,



(Testimony of Dr. Francis Chamberlain.)

and the consensus now is that the greater majority of the instances of heart failure are forward heart failure. In other words, the tissues which should be nourished by oxygenated blood which the heart is pumping to it, in some cases all of it details around in some way the inadequate oxygenation or inadequate blood flow, sometimes working through pressure mechanisms which are intermediated through nervous reflexes, bring about this sequence of events. [276]

Q. Doctor, what is the time element that is involved where you have oozing through the tissues to produce this—say, pulmonary edema and enlargement of the liver?

A. Well, I understand that it can come pretty rapidly. Now that again, I am not a pathologist, and I don't usually see these things, the liver immediately after a sudden death, and the heart immediately after a sudden death, so I am—I have conducted—I have discussed with the chief pathologist of our medical school, asking him how long it takes, and he told me, just as Dr. Lehman told us, he told me that it was about four or five minutes; I think Dr. Lehman said seven or eight, or something like that, but he is the pathologist, and I am a clinician, and I follow my patients when I can to the autopsy table, but I have to rely on other persons for all the evidence about this. I have to get a little help.

Q. Doctor, I want you to if you will, in the future limit your answer to those things you know

(Testimony of Dr. Francis Chamberlain.)

of your own knowledge in this case, not what you have been told, except insofar as it is in evidence in this case. Now, could you have ventricular fibrillation of the heart or this tachicardia and a complete dropping of blood pressure; you do not normally have pulmonary edema manifest itself in a short period of time; do you, Doctor?

A. Well, one could have. On my own experience, I can rely on my experience to state, not again how big the liver is [277] going to be, or what that is going to show. When you saw it, did it have evidence of congestive failure which were described here in Dr. Rush's deposition, namely fluid, frothy fluid coming from the mouth somewhere, a pinkish tinge, is a manifestation of congestive heart failure, and that can occur in a very short time, in the course of any of these clinical conditions.

Q. But can that occur in a very short time from ventricular fibrillation?

A. It can occur in a very short time from the presence of any rapid ineffective heart rhythm, yes.

Q. Notwithstanding the fact that there is no blood pressure?

A. Yes, due to the mechanism of forward heart failure.

Q. And that is the oozing through the tissues, as I understand it, to put it in the laymen's language?

A. Yes, I can say that I have seen that more in severe infectious diseases where the heart is per-

(Testimony of Dr. Francis Chamberlain.)

fectly normal, and where the patient dies a cardiac death due to shock, and some abnormal heart rhythm wherein congestive failure may be an important factor, and where, as soon as the blood pressure drops down, the patient becomes unconscious, they are known to live for some period of time, in a comatose condition, and a heart which appears to be entirely normal can develop clinical manifestations of heart failure.

Q. Now, do you have any knowledge about the liver, about [278] the time it takes to enlarge that?

A. My knowledge of that is based on my quizzing my professor of pathology, and I think the testimony here of Dr. Lehman supports that.

Q. Now, isn't an enlargement of the liver and pulmonary edema a sign of acute heart failure?

A. Yes. No, I should say the enlargement of the liver can occur from a great many causes; actually it isn't just a manifestation of heart failure, but I'd say that the heart failure can cause an enlargement of the liver. It is one of several indications to have enlargement of the liver and congestion of the lungs. It's one of the several causes of congestion of the lung.

Q. Pardon me, but I believe you stated that as being a fact?

A. In this particular case, I think that is the *modus operandi*, yes.

Q. Now, Doctor, in answer to a question as propounded to you, you answered that the man died as a result of the gunshot wound to the face. Now,

(Testimony of Dr. Francis Chamberlain.)

by that statement do you mean to infer to the Court that the injuries to the face were in and of themselves sufficient to cause death?

A. Well, I think that the wounds to the face in addition to the reaction associated with the wounds of the face were sufficient to cause death.

Q. That is not my question. My question is, do you mean to [279] infer that the powder burns and scratches were of such severity that they in and of themselves with no other contributing factors would have resulted in death?

A. Well, if you assume as I would that—when a person gets—I should say this, that if this man had been anesthetized and in a complete—deep coma or something and got that much in the way of shock, I am not a hundred per cent sure, perhaps, it would have. But if you mean from the standpoint of did the shot go into the brain and cause his death mechanically due to the bullet penetrating the brain, which was what I immediately thought in looking at him, because to me—well, it didn't look like scratches, and I thought that his face was pretty well shot up—I mean, my immediate thought was sure, the gun went off and that, but I think that the gunshot I have described, the gunshot causing some of the shells to hit his face, the powder, the burns that he must have had, and the emotional reaction to the whole thing, I think a combination of all of these is quite sensible as an explanation.

Q. Well, Doctor, my question itself is whether



(Testimony of Dr. Francis Chamberlain.)

these injuries to the face were in and of themselves sufficient to cause death, by mortally wounding him?

A. Well, I think these other things that happen to the nervous system in response to the shot, all are part of the picture, I mean to say that if a fellow is shot through the [280] heart, does he drop dead by the bullet itself, and it is not necessary for the bullet to stop the heart, but he bleeds to death, but I think the chain reaction which was started off by this is a very sensible one.

Q. Doctor, did you make a close examination of the injuries to Mr. Lyons' face?

A. Yes, I made a pretty close—well, I am sure I studied his face and looked at his face a few minutes.

Q. Where and when?

A. Within—I got to the body within—I suppose 20 to 30 minutes after the time of his death, and then a good deal later on, because we were there hours and hours waiting for the police, and the doctor to come out for the inquest, and I was there at least half of the time.

Q. Doctor, as a matter of fact, they were merely superficial scratches on the face; were they not?

A. Well, they didn't look superficial to me at the time. Like I said, I felt that was about what it would look like if a shotgun shell went through the skin, and I expected, from my observation of the body and the blood on the outside and so on,



(Testimony of Dr. Francis Chamberlain.)

that the shells had gone in and penetrated his brain.

Q. But that was not found to be the case; was it?

A. Apparently not, but I thought at the time, I was very interested, I thought that the shot had gone into his brain. [281]

Q. Did you observe whether there were any pellets under the skin? A. No, I didn't.

Q. Could you tell whether these scratches on the face were caused by falling through the mesquite bush, or caused by the discharge of the shotgun?

A. Well, certainly I have seen a good many scratches from brush, and so on, and it was my reaction, when I saw this man, that this was a shotgun in the face.

Q. That isn't my question, Doctor.

A. I didn't think that, the question of his having had his face in the mesquite bush didn't enter my mind, I didn't consider that as a possibility.

Q. Well, isn't it a possibility that some of these scratches on his face were caused by his falling through the mesquite bush?

A. Well, I suppose it's possible.

Q. Mr. Lyons was lying under the mesquite bush; was he not?

A. He was lying underneath the bush, but his body had been moved a little ways for the purpose of his artificial respiration, but the time I saw him, he wasn't lying right under the mesquite bush.

Q. Now, Doctor you are characterizing these

(Testimony of Dr. Francis Chamberlain.)

wounds do I understand your testimony to be that they were of a serious nature? [282]

A. I thought so.

Q. Doctor, haven't you known and read of many cases where shotguns have been accidentally discharged and a man has lost his foot or leg or arm and hand and has not resulted in death?

A. Yes, I haven't seen many though as a cardiologist, and I don't see trauma, I don't see many gunshot wounds, I did in my earlier training, but I haven't seen a gunshot wound, other than Jim Lyons', for 20 years. I don't think I am in a position to describe a gunshot wound or something of the sort.

Q. Doctor, the wounds that you did examine on Mr. Lyons' face at the time of this occurrence, how would you compare them with reference to the degree of pain with the injuries that Mr. Lyons suffered in the automobile accident that has been testified to?

A. Gee, I don't know. I don't recall enough of the details of the automobile accident. All I recall is that he had a crash and broke some ribs and I don't know, actually, the intimate details of that. I think perhaps I slept through a little of the testimony as not being important.

Mr. Maguire: Doctor, that's in the medical record, would you like to take a look at it? It's Exhibit 18.

The Witness: May I?

(Document handed to witness.) [283]

(Testimony of Dr. Francis Chamberlain.)

The Witness: Well, I guess this is all on the first page under—it's the medical insurance form, what injuries caused disability, and it says, "multiple contusions, abrasions, lacerations, fractured nasal septum, fractured ribs, hemothorax, gout." Now, that's all it says.

Q. (By Mr. Kriesien): Is there adequate information, for you, Doctor, to be able to state whether the pain suffered as a result of the—of that accident would be greater than that suffered from the lacerations of the face?

A. I have no way of knowing, but he must have been burned, for one thing, which is a painful affair. The severity of the trauma isn't necessarily closely related to the severity of the pain. I think that it's impossible to ask a person to say if this hurt, other than I know that I felt that the emotional trauma associated with the gunshot wound was an important factor, because this man's belief that his boy, who meant more to him than anything in his life, I should say hunting life, even though the women say it is dangerous stuff, and you shouldn't do it, I think is a strong emotional factor here, but I can't say that—oh, because of error, I don't think anybody can say with any certainty, whether there would be any shock associated with it. The degree of shock roughly parallels the degree of trauma, but the association isn't an expectant one.

Q. Well, isn't it a fact, Doctor, that the pain varies between [284] individuals? A. Yes.

(Testimony of Dr. Francis Chamberlain.)

Q. What is the basis for your statement, or do you have any facts upon which to state that Mr. Lyons must have had a good deal of pain?

A. Well, the appearance of his face.

Q. I see. But the extent of the pain from that type of an injury would vary in everyone; is that correct?      A. Yes.

Q. Now——

The Court: May I suggest we take a little recess? The doctor has been talking here for about two hours. You are probably getting a little tired, Doctor?

The Witness: Thank you.

(Whereupon, a short recess was had.)

The Court: Proceed.

Q. (By Mr. Kriesien): Doctor, I'd like to have a specific answer to this question. Is it your testimony that the pain suffered by this individual, leaving out the other emotional factors of anguish and fear, could have or did result in this man's death?

A. I think that the pain alone, without the anguish, would have touched off—without anguish would have touched off the chain of events—would have touched off the rhythm, and I might say something else about this question of pain, [285] and that is the superficial or exquisite area of pain that is generally specialized, which is one of the body's protections to resist it, whereas the nerves

(Testimony of Dr. Francis Chamberlain.)

that are deep in the body, such as when you get a shot, and the nerves that are deeper in the body are considered conveyers of pain, and it is common knowledge, for example, that when a doctor gives a patient the needle in an area, to shoot, he jams the needle in the skin very quickly; from there on, he can flounder around at length in order to get the needle in the vein or artery that he is trying to get it into, and the patient notices it only a second, in respect to the pain, so superficial injuries of the skin are usually quite important.

Q. And we are speaking in terms of these superficial injuries now, is that correct?

A. Yes, since that is what the autopsy states, that they were superficial injuries. That's what it says, at least they didn't go into the brain.

Q. All right. What about this anguish reaction you were speaking of, could that alone have resulted in death?

A. Anguish alone can produce a chain of events which can result in death. The patient—I mean it isn't very common, but there is plenty of it on the record, scattered cases here and there, where a patient, from an emotional reaction of joy or anguish suddenly dies, in which case the mechanism is usually one considered to be of some abnormal rhythm [286] developing in the heart. Again, there is a lot of guesswork as to this, because you don't have all the gadgets that shows what the pressure is doing, or what the heart is doing, because sudden deaths are unexpected.



(Testimony of Dr. Francis Chamberlain.)

Q. Now, Doctor, you used the words "It was not a common situation to result in death," is that true of superficial injuries, that they do not commonly result in death? A. Yes.

Q. Now, Doctor, may I ask you this: What would be the time element involved, taking into consideration, say the fear element; the anguish element; the pain element, up to the time of the individual losing his consciousness?

A. I assume that it would be rather short in this instance, because I assume with what Dr.—with a doctor 50 yards away, he would have cried out if he had known something was wrong, which he didn't. But the time it takes for something like that to develop, and for the shock to develop, for the abnormal rhythm to develop is extremely variable. It might take five minutes or it may be longer, such as in an operation, there is shock which occurs three hours after the operation is over. Sometimes it occurs immediately.

Q. Does it occur immediately through the sequence of events that you have named, rather concerning the pooling off of the reservoirs and adrenalin going to the blood stream there, that chain of events? [287]

A. Sometimes it may occur very rapidly.

Q. By very rapidly, what do you mean?

A. Within a period of a very few seconds.

Q. I see.

A. The common—we all see the ordinary fainting attack which encompasses part of this mech-

(Testimony of Dr. Francis Chamberlain.)

anism, the ladies—the lady is told her husband dies and she collapses. I mean those things can happen very quickly.

Q. In your answer, you have placed some considerable emphasis on the time element involved; assuming that the fact was that there was evidence of pulmonary edema at the time that Dr. Rush arrived at the body, would that change your opinion?

Mr. Maguire: I think that assumed something that is not proven. I don't think there is any evidence that there was pulmonary edema at the time he first arrived.

The Court: I don't think there is.

Mr. Kriesien: This is cross-examination, your Honor, and I have not had an opportunity to cross-examine Dr. Rush on these facts. I am not asking him anything except if that is established a fact.

The Court: All right, I will allow it.

The Witness: I am sure that allowing—I would expect it to take a few minutes to get this pulmonary edema. I wouldn't expect it to occur in a half minute. I don't know—I should—I think it is hard to be pinned down to maybe [288] three minutes or longer, but we have evidence that there was blood flowing through the lungs and it is sort of an indirect part of it the frothing, there was blood flowing to the center in the brain, because he breathed much longer than the usual patient who dies, and then there was other evidence that the blood was flowing quite a while, because this man,

(Testimony of Dr. Francis Chamberlain.)

as pointed out, lived long enough to have swelling develop around these areas of the trauma.

Q. Well, Doctor, again you are getting into another feature. Is it your testimony now, that the blood was flowing through that man?

A. Yes. the blood flows, in the presence of a rapid ineffective abnormal rhythm, but it's a matter of degree. The blood flow is markedly cut down, and the head pressure that gathers in between the stroke and the relaxing between the strokes is missing, but there is blood flow. There is a critical situation in which there is some interference with the blood supply to the legs that applies to the operation of the aorta where some individuals even live normal lives and even, I have seen the kids play football where the column of blood is interfered with in its flow to the legs, and where one can't feel any pressure in the arteries of the legs or in the arteries of the thigh, and yet where these legs continue to work. These things again, are a matter of degree. The fact that you can't feel any pulse doesn't [289] mean that there was no flow of blood. It means that the usual head of pressure is not there.

Q. Maybe I misunderstand you, Doctor, I thought you said there was no blood flow when a man is in ventricular fibrillation or tachicardia?

A. But no blood pressure does not mean there was no blood. There is no blood pressure in these kids that lead normal lives without an open column of blood from their heart down into the legs, and

(Testimony of Dr. Francis Chamberlain.)

yet they walk and run and do all these things and their feet are warm, and so on, but there is no blood pressure.

Q. Doctor, can artificial respiration——

A. I should say this, you could get blood pressure if you poked a needle in the vein, you could record blood pressure of these tiny vessels but you can't by the ordinary means. Excuse me.

Q. I lost my train of thought, Doctor. Oh, Doctor could artificial respiration, rather vigorously done, produce pulmonary edema?

A. No, I don't see how it could. If anything, it might help, because artificial respiration would increase the oxygenation of the blood and the mechanism of pulmonary edema; as I mentioned before, there are two methods, it's either too much blood that gets to the lungs, it's backward mechanism due to too little. The forward is the most general. [290]

Q. Well, assume the forward mechanism, and artificial respiration is being applied, do I understand that that would not force some blood out into the lungs?

A. Well——

Mr. Maguire: Just a minute. May I ask you a question? You don't mean to the lung cavity but into the blood vessels?

Mr. Kriesien: Let the doctor answer.

The Witness: Artificial respiration will help to a certain degree through the suction pressure and then the subsequent suction to drive a little more blood to the lungs, but the main thing it does is to



(Testimony of Dr. Francis Chamberlain.)

cause a more effective type of respiration, which would let a greater amount of oxygen get to the lungs. The stertorous breathing that is associated with these states like this, that we mentioned, the stertorous breathing is a rapid, shallow breathing, not necessarily ineffective breathing, and if the stertorous breathing is a rapid, shallow breathing, we sometimes help nature by increasing the depth of respiration. I am not sure that the record—whether Dr. Rush applied his artificial respiration before the stertorous breathing stopped or afterward, but that is the general policy and would be the policy; certainly the sensible thing to do is to use it under both conditions, especially when the breathing stopped.

Q. Doctor, is there any particular time for stertorous breathing to start? [291]

A. Yes, stertorous breathing usually develops within a few seconds' time, usually after 10 seconds after an effective beating of the heart stops. The stertorous breathing is motivated by the blood center in the brain, the respiratory center in the brain, and once the respiratory center of the brain develops an inadequate supply of blood, stertorous breathing starts and consciousness is gone, and they occur usually quite close together. I have been talking to patients and they looked perfectly all right and suddenly start to breath (indicating), I have—that sort of thing I have seen it happen within two or three seconds of the time they have been talking to me. Then, the thing about stertorous breathing, though, is that it usually don't last over half a



(Testimony of Dr. Francis Chamberlain.)

minute, then it stops. Which was not the situation here. It stops and the patient is dead.

Q. Doctor, just a few more questions. I noticed that the electrocardiogram taken of Mr. Lyons in February that is in evidence in this case was taken some two weeks before this occurrence on February 3rd, 4th, and 5th——

A. I thought it was taken within a week of it. I thought it was on the 3rd and that the accident occurred on the—what was it, the 10th or 12th?

Q. I am sorry, I withdraw that. I was in error. On the date of this strenuous fishing, the marlin for half an hour, does that bring into play the muscles that you have described [292] as the ones causing the fatigue pains?

A. Fatigue pains, we are talking about fatigue that doesn't affect the heart. On the other hand, fatigue pains that result from fear—is that what you mean?

Q. I mean the type of fatigue pains that allegedly Mr. Lyons had?

A. Well, the type of fatigue pains which I think the record suggests that he had, supplemented by Mrs. Lyons stating that were at the end of the day, and evening, about the time he was ready to go to bed, that type of fatigue pain can come along—in that type of fatigue pain, in an individual, a typical busy businessman who is worn out, who is exhausted from his work, the characteristic thing would be that he would come home from this pattern of pain at the end of the day, but he would

(Testimony of Dr. Francis Chamberlain.)

go on the hunting trip and he had gone on hunting trips and carried a buck on his back, and so on, and feel wonderful all week end, and have some—have none of the more common fatigue pains, the more common cause of heart failure, far and away, I'd say the odds are ten to one that this pattern of chest pain, of the radiation to the arms associated with fatigue is an emotional type of fatigue, and not a physical type of fatigue. I rarely ever see a day laborer who has worked all day, and he comes home, and he says, I got a pain in my chest, he gets that pain in his back or something of that order, but it's far and away [293] the most common is emotional fatigue.

Q. Did Mr. Lyons evidence any pain such as arthritic conditions of the back during this half-an-hour play of the fish?

A. He had no complaint, except that the fish got away. He made no physical complaints whatsoever, nor did he register any symptoms, nor did he say anything or register any sign of fatigue.

Q. Now, Doctor, assume that the injuries to Mr. Lyons occurred after the onset of the heart attack with——

A. Assume that what, now?

Q. Assume that these injuries occurred after the onset of the heart attack from the autopsy report and from your observation of this individual and knowledge of this case history, would you have an opinion as to the precipitating cause of the heart attack?

(Testimony of Dr. Francis Chamberlain.)

A. No, if that had happened, I would assume that it was one of those instances of a man who just suddenly dropped dead due to a heart attack, but again I would say I don't feel that is pertinent to this man, because the findings in the autopsy that were described, I don't think—I don't think justify that. I don't think again there is any evidence in that autopsy report to suggest that this man had any more in his heart than the ordinary man 49 or 50 years of age would have. [294]

Q. But, Doctor——

A. Am I beating around the bush too much, answering your question?

Q. Doctor, from that autopsy report, I believe you testified earlier didn't tell you whether the arteries were almost entirely diminished in caliber?

A. No, I think that is such an important thing in medical parlance, that if they were almost entirely closed, or were closed, they would say so.

Mr. Kriesien: That's all, your Honor.

### Redirect Examination

By Mr. Beebe:

Q. Doctor, from the clinical findings and what you have observed, do you have an opinion as to whether it is likely or probable that most coronary arteries are substantially closed?

Mr. Kriesien: Objected to on the ground and for the reason that the witness testified on cross-examination that he could not tell the diminish-

(Testimony of Dr. Francis Chamberlain.)

ment of the arteries of the man's heart, except through assumption, and assumes facts not at issue.

The Court: The objection will be sustained.

Q. (By Mr. Beebe): Now, in connection with this matter of blood flow after the cessation of any effective heart rhythm, I believe you discussed venous or arterial flow. Now, how [295] about venous flow, what does the venous blood flow depend upon; does it depend upon heart action?

A. Yes, it depends to a certain extent upon heart action. It depends a good deal on movements of the muscles of the body, the muscular milking action of the muscles moves the blood from the veins up into the heart. It also depends on the state of the tension of the veins, the arteries and the capillaries at the time, since as mentioned before, if the little blood vessels suddenly dilate due to some unusual stimulus, it's like the water appearing to move in a river which is wider and smoother is much slower, and a great deal of the blood would stagnate there in these areas and not get going to the heart, so that the venous flow would be diminished. But under ordinary circumstances there are several things—I think three things mentioned in detail, the output of the heart, which pushes the blood all around; the milking movement of the muscles of the body and of the muscle tone of the little vessels themselves. I think those are the three major factors.

Q. Well, Doctor, would blood flow from the

(Testimony of Dr. Francis Chamberlain.)

movement of the breathing cause some venous circulation?

A. Yes, the movement of breathing—the lungs work sort of as a bellows pumping some blood out and having other blood come in, so the blood is capable of a little traveling along the way, and the blood gets along, so therefore the blood [296] from right to left tends to go through the lungs and in the course of the circulation of the blood, and there is some increased blood—I don't think it will amount to a great deal, but I think that artificial respiration—I am reasoning physiologically—I don't know of any experiments that show that, but the blood going out from the heart, it wouldn't by itself correct the situation, but it would probably help some.

Q. Doctor, in a case where there is any significant aortic valve lesions or disease, is there a sign of it indicating that known as enlarged heart?

A. Is there a sign?

Q. Yes. A. Yes.

Q. Is that one of the signs of significant aortical valve lesion or insufficiency?

A. Yes. If there is an important degree of insufficiency of the aortic valve, the heart is like a pump, like a leaking pump, it has to do more work than usual, and if there is an important degree of the insufficiency of the aortic valve, the heart gets larger.

Q. Now, is a description of a heart with a left ventricle slightly hypertrophied, is that sufficiently



(Testimony of Dr. Francis Chamberlain.)

enlarged in your opinion to have a sign of aortic insufficiency?

Mr. Kriesien: If the Court please, I will object to [297] that on the ground and for the reason that the autopsy report does not indicate the degree of hypertrophy.

Mr. Beebe: It says "slightly."

Mr. Kriesien: Well, slightly can mean any degree.

The Court: I think I will allow the question.

The Witness: Well, I should say the clinical method of telling how big a heart is, and the most delicate method of telling whether the heart is enlarged or not, is the electrocardiogram which was taken just before death, a week or so before death. The electrocardiograph is the most delicate one. One doesn't have much enlargement of the ventricle, and the electrocardiogram can tell a little greater degree of enlargement for the left ventricle or to the heart in general.

Q. Well now, did the electrocardiogram taken on February 4th indicate any enlargement of the heart?

A. No, it shows no evidence of hypertrophy of the heart.

Q. Now, Doctor, I have just two more questions. In your cross-examination, you were asked about coronary insufficiency. Now, I wonder if you would tell us about that term particularly with reference as to whether there is more than one kind, and with respect as to whether it is a relative term?

(Testimony of Dr. Francis Chamberlain.)

A. Well, coronary insufficiency means that the coronary vessels don't pump enough blood to the heart muscles to be sufficient, and by that to be sufficient we assume to be [298] sufficient to carry out a person's body functions. A patient with severe coronary disease—coronary insufficiency to the point where he can't do anything without pain—where some of them get 20 to 30 attacks a pain in a day lying in a hospital bed, there are other individuals who have sufficient collateral coronary circulation or who have—I should say—whose coronary disease is such that it takes a good deal of exercise, climbing a hill with a deer; pulling a big marlin—if I can get a plug in—these real strenuous exertions which would bring on a type of pain. But again coronary insufficiency is predicated on two things. One is on the amount of coronary thickening. Another one is on the degree of collateral circulation. Some individuals develop wonderful collateral circulation to the point where they may actually have several stationary blood vessels and lead normally active lives and never have any pain manifestations of coronary insufficiency, so it is a physical assistance based on the needs of the heart for the amount of blood which is going out to the coronaries.

Q. Is what you have been describing, is that an organic coronary insufficiency or any of those or all of those?      A. What I have been describing?

Q. Yes, just now.

A. Well, at the start, the first one that I mentioned, where a person has the coronary pain in

(Testimony of Dr. Francis Chamberlain.)

the course of heart disease, that is coronary insufficiency. On the other hand, you can [299] have coronary insufficiency without any disease whatsoever. The individual—and we doctors in this room have all seen them—the individual who has a perfectly normal heart, whose heart beats 250 to 300 beats a minute or—I should say this—200 to maybe in the order of 200 and 260 beats a minute, unusually rapidly, so that he can still maintain consciousness, he has coronary pain.

Q. Well, is this coronary insufficiency?

A. Yes, and he may have this without any heart disease whatsoever. It is the exception to find an individual with a perfectly normal heart to, under circumstances where the heart has a big job to do, can get enough blood to where coronary insufficiency may not develop.

Q. Now, Doctor, in your practice, have you had a special interest and made a special study of any forms of sudden death?

A. Yes, that has been one of my chief interests in the field of cardiology.

Mr. Kriesien: If the Court please, I object to that question, on the ground that it is not correct in redirect examination. The man has brought forth all his qualifications before.

The Court: Overruled.

The Witness: I beg your pardon?

The Court: I overruled, you may answer. [300]

The Witness: During my period—in my sixth

(Testimony of Dr. Francis Chamberlain.)

year of training, I started a special study on the heart and sudden death, and especially with the type of sudden death or sudden cessation of the heart beat or where there is a syndrome in the heart suddenly stops its effective beating and in this particular situation the heart, after a period of time, when the patient is unconscious and after the stertorous breathing starts and stops and the patient seems dead and the heart comes back again—it is not a very common condition, but I have studied it more than any other single type in my field, to that point where I have reviewed every case of sudden death which has been documented by electrocardiograms or clinical studies with the Presbyterian Medical Paper, the Massachusetts General Hospital in Boston, in all the private patient files of Dr. Paul White, at the University of California Hospital and at the San Francisco County Hospital. I have reviewed all the records from the time when electrocardiograms were taken, in all those, in addition to that, I think I am sure I have made—have been more interested in this problem of sudden ineffective beating of the heart than most cardiologists.

Q. That's all, your Honor, no further questions.

Mr. Kriesien: Nothing further, your Honor.

The Court: All right. May the doctor be excused?

Mr. Maguire: Yes, sir. [301]

Mr. Kriesien: I have no objection, your Honor.

The Court: All right, you may be excused, Doctor.

(Witness excused.)

Mr. Maguire: Call Dr. Rush.

DR. HOMER P. RUSH

recalled as a witness on behalf of the plaintiff, having been previously duly sworn, testified further as follows:

Further Direct Examination

By Mr. Beebe:

Q. Dr. Rush, you had told us before, something of the occurrences leading up to and after Mr. Lyons' death, and I don't believe you were asked as to at what point of time it was when the evidence of pulmonary edema was discovered, whether it was when you first arrived or afterward?

A. I would imagine I had been there probably a period of maybe two or three minutes before he began to show his pulmonary edema with frothing sputum coming from the mouth.

Q. Was it before or after you had commenced to give artificial respiration?

A. We didn't attempt any artificial respiration until after cessation of breathing, and this occurred before that.

Q. I see. Now then, Dr. Rush, is there any—a sign known to medical science which is available or can be observed upon observation when a man has on a shirt, or a close-necked shirt [302] with respect



(Testimony of Dr. Homer P. Rush.)

to whether there is any significant aortic lesions or aortic insufficiency?

A. There is one in respect to aortic insufficiency, there is a second in serious valve lesion, aortic stenosis in which it is, but it is in aortic insufficiency, yes, sir.

Q. What is that sign?

A. It is a marked increase in the contracted blood vessels in the neck. In fact, that pulsation is so marked that it usually moves the lobe of the ear with each heart beat, and when I was in Vienna, we were told that we should be able to look at a patient and diagnose it, because that was supposed to be most constant.

Q. That was when you were studying in Vienna, was it?      A. That's right.

Q. Now, if the man is under exercise or exertion, would that be even more——

A. That would be more aggravated.

Q. Did you have occasion to see Mr. Lyons without a shirt, that is with his shirt off at any exertion?

A. He had no shirt on when he was playing the marlin, I believe he was completely shirtless, and I did observe him.

Q. Did you observe the signs that you have mentioned?

A. I never did—as I have said before, I never saw anything that made me feel Mr. Lyons was not in good health.

(Testimony of Dr. Homer P. Rush.)

Q. Now, Doctor, what are the signs of acute aortic insufficiency? [303]

A. Well, the one that we just mentioned, which would be associated with the phenomena, plainly so or a Corrigan pulse which merely means a marked increase in the pulse which is demonstrated by systolic pressure, with the diastolic pressure being below and the pulse pressure being great, and the marked fall in the diastolic pressure and sudden filling of the vessels give a characteristic feel to the pulse in the radial, which we speak of as a Corrigan pulse. Second, is a diastolic murmur which is heard over the basal portion of the heart and usually goes down the left side of the sternum. There may or may not be a systolic murmur, although usually there is. Third, this marked increase in pulse pressure that I have mentioned with a low diastolic pressure and usually some increase in systolic pressure. Fourth, the capillaries tend to show this marked pulsation greater to the extent of circulation than average, and as a result you can see pulsation in the nail beds and pulsation in the lips, with sort of a higher pressure to hold the pulsation back. I think those would probably be the commonest, these others are less important.

Q. Well, does the size of the heart have anything to do with it?

A. Enlargement of the heart, of course, occurs very early in aortic insufficiency, and it usually is of the left ventricle, and that is shown physically by a heavy or increased pulsation [304] of the beat

(Testimony of Dr. Homer P. Rush.)

which is in the area of the left breast, and then by percussion or palpation one can find if the heart activity goes out further to the left than would be normal, and it can also be shown up by an X-ray and shown up by an electrocardiogram.

Q. I was going to ask you, Doctor, is the enlargement of the heart, that you are speaking about in connection with aortic insufficiency, would that be diagnosable by fluoroscopic examination?

A. It would be.

Q. Now, is any enlargement of the heart—just any enlargement of the heart, a sign of aortic insufficiency?      A. No.

Q. What is the nature of the enlargement, which muscle exists from it that is a sign of aortic insufficiency?

A. The first thing that is enlarged is the left ventricle, and that is because when we have aortic insufficiency, it's likened to a pump, this pump has extra work to do in order to force out more blood, because blood rushes back to it like the valve in a machine, and as a result the left ventricle gradually increases in thickness, and that we refer to as left ventricular hypertrophy, and that becomes more and more marked. Now, as that ventricle goes under additional strain, we can add to it some degree of dilatation in which it stretches the muscle, really, and that gives us a definite enlargement [305] of the left ventricular and aortic enlargement which could be told by an X-ray man or cardiologist in the first place without ever seeing the patient.

(Testimony of Dr. Homer P. Rush.)

Now, one can get a similar enlargement and high blood pressure and aortic stenosis, but one, the aortic insufficiency, it is one of the common causes for the so-called "big heart," the usual—the largest of hearts are markedly sclerotic, and the insufficiency, after this we can begin to get back pressure and the other chambers can be affected, but that is the first one.

Q. Now, Doctor, what are the signs of coronary insufficiency?

A. I think that question will be a little difficult to answer, because one could have coronary insufficiency with no findings. One can also have coronary insufficiency with findings of heart muscle strain, for coronary insufficiency implies that one is not getting an adequate blood supply to the muscle of the heart, so that our finding must be that if it would be anything, that would interfere with the pericardium or muscle action, the symptoms are commonly those of pain, chest pain of some type, but one can have the symptoms going along with heart failure, because it may be a slow developing insufficiency in which the heart muscle gradually just becomes weakened, and the body can't do its work, and then we have a congestive heart failure, so it can go—can follow really under any of three types or patterns. One would be the angina syndrome, [306] two could be the congestive syndrome, three, because of the poor nourishment associated with it, we could get myocardial infarction and changes in rhythm.

(Testimony of Dr. Homer P. Rush.)

Q. Now, Doctor, is it possible for this to be acute in coronary insufficiency in a heart, we will say, which is presently free from any diseases?

A. Yes, it is.

Q. What kind of coronary insufficiency would you call that?

A. Well, you'd speak of it—that is a functional insufficiency, it would be, say, the inner pathology of the heart function, if a man had a severe hemorrhage and lost, we will say, half his quantity of blood, so that there is not an adequate amount of blood circulation to keep the heart functioning, there wouldn't be any blood going to the coronaries and there would be insufficiency, physiologically speaking. If a man had shock, in which the blood pooled some place in the body so it couldn't get back to the heart, then blood couldn't fill up the coronary circulation and we'd have a coronary insufficiency that would be functional in nature. If one has a heart that is working very, very fast, and has a tachycardia of 250, we'll say, that is a fast heart, 250, the heart muscle not being able to get an adequate amount of blood to do that work, we would have a relative coronary insufficiency. I think we should keep in mind this is a relative term, and that the coronary blood supply depends [307] upon the difference in pressure between the pressure that is at the first part of the aorta and what the pressure is in the intramuscular spaces in the heart, because it's that change in pressure that lets the blood flow to the heart muscle and of course that is going to



(Testimony of Dr. Homer P. Rush.)

vary somewhat the heart beat. Now, coronary circulation is different than average circulation, inasmuch as normal circulation we fill up the blood vessels and the heart drops and we get the force in, but circulatory circulation, that's when we get the blood vessels released out into the arteries and the heart opens up and releases that pressure of the aorta, and it goes between the aortic ring and the muscle for the aorta, and it may be forced back into the heart because there is no pressure against it, and is thrown on the heart as its pressure may vary.

Q. Yes. Now, Doctor, what are the signs and symptoms of passive congestion?

A. The signs and symptoms of congestive—passive congestion would be—probably should be defined in two groups. One would be the passive congestion due to left ventricular failure, and the second passive congestion due to right ventricular failure, then I should say have a third one where both valves fail, which is a common one. From the left ventricular failure, we get our stagnated blood, and that really is what passive congestion infers above the diaphragm [308] and in the lungs, and in the lung circulation, first, we would get a congestion of the blood in the lungs, it is as though you would tie a string around your finger and see the veins contract in your finger, and that gradually becomes increased, and then it oozes out of the capillaries so that there is bubbles that get in the bronchi, and if it gets far enough, then we would get froth in

(Testimony of Dr. Homer P. Rush.)

the pleural cavity. Now, from the right side the pressure tends to be down below the diaphragm that we get the same phenomena, it tends usually to go in the liver, which becomes enlarged and the liver is likened to a sponge in which it fills up with blood and therefore it becomes enlarged, and of course all of the tissues in the abdomen and the extremities, the lower extremities will show edema or swelling on the lower extremity, even to the point where we get free fluid in the abdomen. Now, if both the right and left, then we get both of these phenomenon.

Q. Is a frothy liquid which is discharged from the mouth a symptom or sign?

A. As I said, when you get to the place where you have enough in the lungs and it begins to get bubbles in the bronchi, and of course that fluid that oozes out gradually gets mixed up with air, and it makes a white frothing type of material, then of course, when it is coughed up, when a patient has to cough it up, we know the coronaries are bleeding. [309]

Q. What is the significance of this white frothing appearing to get a pinkish tinge?

A. That's when the blood cells are oozing out with the liquid part.

Q. Now, Doctor, what are the signs and symptoms of shock?

A. The signs and symptoms of shock are, I believe—maybe we should divide it, it goes really into

(Testimony of Dr. Homer P. Rush.)

three stages. Shock is a really poorly understood mechanism.

The first thing that happens, is the individual usually feels weak and has a tendency to be cold, gets cold, clammy, or sometimes cyanotic. Circulation becomes impaired. Pulse becomes fast, early, becomes thready as the blood pressure falls and the little veins and little blood cells—it's more than veins—but the little veins is the peripheral circulation, so the blood starts to stagnate in them, but these can't push it on through. The next thing that we get is a fluid that tends to go through these capillary walls so that we have fluid in the spaces around the blood vessels, with this we get less and less blood going back to the heart, and the second stage, I have sort of described the third stage, is where this becomes irreversible and that gets to the place where there is not enough blood that is going back to the heart, so that the heart has any blood to push forward, and we have a condition that would be really forward failure.

Now, in shock, there is apparently a noxious material—— [310]

Q. Just a moment, when you say forward failure, do you mean forward heart failure?

A. Forward heart failure. There is a noxious material that apparently is formed which is a chemical unknown for the most part; we know of two factors of it, one, that it may be made by the kidneys, it may be made by the adrenals, but it may be made by the liver. One of these substances has a

(Testimony of Dr. Homer P. Rush.)

tendency to make blood vessels to constrict, the object being basically to try to get the blood out of there, out in the circulation again. However, the second one that apparently comes from the liver, apparently tends to neutralize that effect as to damage these little arterials and blood vessels so to even neutralize the effect of the secretion from the adrenals which stop, and we get more fluid accumulating in the tissues, we get more dilatation of the peripheral circulation, we get lower amounts that get back to the heart, and we feel that is the so-called irrevocable signs of shock, in which the tissues all over the body and particularly in the vital parts, and these patients usually die.

Q. Doctor, does shock produce signs taken at post-mortems that would be specifically characteristic for these conditions?

A. I don't have none, I don't think there is, because shock has a physiological status. I presume that if one possibly microscopically would check adrenals and check it for normal, that specific term—it might be found in some of the tissue or the like, but I know of no work on it, but there is a lot [311] of work I don't know about shock.

Q. What are the common causes of shock ?

A. Trauma is one of them, particularly a crushing trauma is, where tissue is bruised. Hemorrhage, particularly sudden hemorrhage, certain allergies will give shock like serious infective fevers have been known to give shock; bone injuries. In fact, I think that you could get shock from many things



(Testimony of Dr. Homer P. Rush.)

that would be a sudden change in the physiological mechanism of the body, those are common examples.

Q. Is fright, or other strong emotion a common cause of shock?

A. I think that is one of the definitely accepted more common causes of shock. I think that fright would rank almost up with injury. I know of no statistical studies on that, I am merely giving my impression, but then I am a cardiologist, and I don't see lots of people with injury.

Q. Now, Doctor, what is the largest medical findings with respect to whether a strong emotion, such as fright, may result in sudden death?

A. Well, it is reported by good authority, and I have certainly been familiar with it all during my experiences and practice, that shock or fright or strong emotional tension can be the cause of death. I think that it's fair to say going back 25 centuries you will find such reported information if one will look the literature up. However, any strong emotion can do it. If I can quote a name, Benjamin Rush reported [312] the death of the speaker of the Continental Congress, who died suddenly of supposedly the great joyous emotional tension that he had when he heard that Cornwallis' army had surrendered, and that is a reported death, and that is a recorded case.

Q. Doctor, what is meant by arrhythmia of the heart?

A. Arrhythmia means an irregularity in the beating of the heart.



(Testimony of Dr. Homer P. Rush.)

Q. Is there more than one kind of arhythmia?

A. Yes, these are many kinds of arhythmia.

Q. Are these kinds of arhythmia serious, in that they may endanger the life of the patient?

A. Yes, there are several of these that are important, there are some of them that are very, very serious.

Q. Will you describe the serious arhythmias?

A. All of them?

Q. Well, the ones that involve any threat to the life of the patient?

A. Well, in order to give any discussion of arhythmia, that would have any logic to it, I presume one would have to start back and say that we have, among other of the functions of the heart, that of rhythmisity, and we usually speak of this particular phase of it as the mechanism of the mechanics or mechanisms of the heart beat. Now, normally the heart carries its normal rhythm, which we speak of as a sign of auricular rhythm—didn't we have a diagram of the heart here? [313]

Q. Yes.

A. I think it might be a little easier for people to understand what I am talking about if we had that.

Q. Can you refer to this one, Doctor (indicating)?

A. No.

Q. Will you come over and pick out the one you want? Do you have any objection if we use this for the purpose of illustration?

Mr. Kriesien: I have no objection, your Honor.

(Testimony of Dr. Homer P. Rush.)

The Court: Very well.

Mr. Beebe: It's understood, counsel, that we are limiting it on this as evidence just for the purpose of illustration.

The Witness: If I could mark on the back of that, I could use it.

Mr. Beebe: I had better have this one marked for identification.

The Clerk: Plaintiff's Exhibit 40 for identification.

(Document was thereupon marked Plaintiff's Exhibit 40 for identification.)

Mr. Beebe: Dr. Rush, if you want to use this side of it, I had better mark it now.

The Witness: I don't use that side of it.

Mr. Beebe: If you are going to use it for a chart, we will mark it.

The Witness: It will show up better than all these valves in there, I don't want those at all. [314]

The Clerk: Plaintiff's Exhibit 41 for identification.

(Document was thereupon marked Plaintiff's Exhibit 41 for identification.)

Mr. Beebe: All right. Let's set it here (indicating). Now, Dr. Rush, when you refer to any point on this Plaintiff's Exhibit Nounber 46, don't say "here and there," if you want to point to something here, make an arrow to it and number it, so that the record will be clear, because "here and there,"

(Testimony of Dr. Homer P. Rush.)

means nothing to the record, do you understand, Doctor?

The Witness: I understand, I will try not to point.

Mr. Kriesien: May I approach the exhibit, your Honor?

The Court: Yes.

Mr. Beebe: Do you have a soft pencil that will show up nice and clear?

The Court: I have a red one or a blue one.

Mr. Beebe: What I had in mind, was something your Honor could see up there.

The Witness: I might start out by saying that—is that visible to everybody?

The Court: I can see it fine, Doctor.

The Witness: To start out with, the heart is a muscle and its blood supply comes from the outside. Its nerve supply comes really from the inside, that's demonstrated in this diagram here (indicating).

Q. (By Mr. Beebe): Now, you are referring to Plaintiff's [315] Exhibit Number 46 for identification?

A. Yes, I am going to show it here——

Q. But I want the record to show which one you are using, which exhibit.

A. As shown on Exhibit 46, that——

The Clerk: Exhibit 40.

Mr. Beebe: I am sorry, Exhibit 40.

The Witness: All right. Exhibit 40 has an arrow, one, shows that it goes to it, an example of the coronary veins going to the outside of the heart, and sending its motion to the heart muscle. Heart

(Testimony of Dr. Homer P. Rush.)

muscle is represented by the area that I have marked number two with a circle around it. Now, the nerve supply of the heart follows the liner of the heart or endocardium of the heart, and that is this little area that I have marked with an arrow pointing to it and called it three, and that nerve supply is given here as an example in yellow, that I have put an arrow to and have marked four, and it goes down the lining of the heart, and it sends its fibers to the heart muscle from the inside. Now, if I may have this exhibit—that's going to be 41, I suppose?

Q. Yes, 41.

A. I am going to make an outline of a heart. It won't be as good as the artist's, and show up above with narrow, thin muscle, the auricle and show below the ventricle with [316] thick muscle, and the septum, the right ventricles as thinner muscle than the left, and our valves I am putting in here for identification in red. This is on the right side. This is on the left side, in the heart chambers and our thin septum and the auricle, I will label these the right auricle R.A. and right ventricle R.V. and left ventricle L.V. or for left ventricle and L.A. for left aorta and not auricle, but now the big veins come from the right auricle, as I have shown up here in a place that I will label number one with a circle around and a number two with a circle around—I am putting them for identification. Now, the nerve mechanism that controls the heart beat is the easiest to notice, which is a nerve body which is up



(Testimony of Dr. Homer P. Rush.)

in the junction of the area of where the great veins come in, and I have made it on here as a solid blue line, and put an arrow on it calling it number three. There is no nerve tissue that goes between this node and the second node in the heart, which is at the top of the ventricular septum, and known as the A.V. node and we will call that number four. I don't know why we don't just call these as A., B., C., and D., and this as S.A. This is known as the auricle-ventricular node. Now, there is over from the A.V. node a nerve tissue that goes to the muscle of the heart, as we demonstrated in number 40, and labeled it number four, which I will show here also, and it goes down under the lining of the heart, and then sends its [317] branches out into the heart muscle as a nerve network, that we call Purkinje's and fibers, and after this nerve tissue gets down a short ways to the septum, it divides and we have these two divisions as the bundles, having the left bundle and the right bundle, and it's got these up (indicating). Now, as it goes out to the other side, this whole nervous system is known as the His-Twara.

Q. I just want you to indicate these nerve bundles by a number. Put a number on them on the right or the left?

A. Well, all right. We will just call this one the right bundle.

Q. You have written——

A. And this one the left bundle.

Q. All right, thank you. Doctor.



(Testimony of Dr. Homer P. Rush.)

A. Now, we also have a network of fibers going on across the septum from each of these bundles. Now, coming into both of these nodes from the outside, we have two nerve systems or two groups of nerve fibers, one that comes in from the sympathetic system that I have drawn in blue, and also sends branches down to the A.V. node and we will speak of these as the sympathetic nerve. A second one which comes in a branch of the vagus or the parasympathetic nerve, it is sometimes called, and we will speak of it as the parasympathetic.

Q. You have indicated both of those in red?

A. I have indicated the parasympathetic in red and the [318] sympathetic nerve in blue, that go to these two nodes.

Now, if we get strong stimulation over the sympathetic nerve, it will make the heart go fast. If we get strong stimulation over the parasympathetic nerve, it will make the heart go slow, so that we have a balance in the normal heart beat by how much stimulation we may be getting from these two nerves in the normal individual. Now, these nerves are not necessary to control the heart completely, they are merely accessory nerves, because the heart is an automatic action, and will do it by itself, but these nerves will influence the heart as regards its beat, when the heart does not have other things that make it work. Now, the reason I make that statement, is because a working heart will ignore its nerve impulses.

(Testimony of Dr. Homer P. Rush.)

The Court: What did you say?

The Witness: A working heart, that is that heart that is going fast, that is working hard will not accept the impulses from the vagus to go slow until after it is quieted down and rested. Now, the impulses that start the heart beat, start in the S.A. node and it goes over the surface of the heart, which we might say, as dropping a pellet in water, we make a wave, it comes out from this node and goes across over the auricle, and when that reaches the A.V. node, it is now conducted about this system into the ventricle. In a regular order. The electrocardiogram measures this activity [319] that goes on through the electrical play in the heart muscle and really is not a measure of the heart beat. It occurs from the heart beat. Now, if we start here, which is the normal place, then we have a normal heart rhythm and if we get a lot of sympathetic impulses it goes faster, and we speak of it as a tachycardia, of an auricular tachycardia. All right, if we get a lot of impulses from the parasympathetic, it goes slower, and if in breathing, as we do, we can have influences that come in over the vagus or on the respiratory phase, and that will make the heart go slow, and then it will speed up and go slow, and that is arhythmia, it is called respiratory arhythmia. If we had some part—if the auricle out here (indicating) becomes irritable, then the node, such as I have marked here with an X, 1-X, we'll call it, that initiates a heart rhythm, and it comes from some place and has to go faster than

(Testimony of Dr. Homer P. Rush.)

is normal, and that would be an auricular tachycardia. It can come from any place, of course, in the auricle. If it is down here in the ventricle, that I have marked 2-X, then we'd have a ventricular tachycardia. Both of these are regular, we also can have it start in this node here (indicating). In the S.V. node, which we speak of as a node, but it can go fast or slow. Now, if the auricle becomes more irritated for any reason, mechanical reason, nervous or what have you, then we tend to develop rapid impulses that go around through the [320] auricle and it will make the rate go up about 300, and we call that an auricular flutter. That's regular, that's the first one of these—that's one that could be serious. I should have stated the ventricular tachycardia can be serious if that goes still faster, and it's not a regular course, but an irregular course that it follows through it, and we have an auricular fibrillation, we can have the same thing that goes on in the ventricles, and if it follows the regular course, the heart will go faster, and we will have it going about 260 to 300 before we get the flutter, then we have a ventricular flutter, and if it goes still faster than that, then we have ventricular fibrillation. Now, when we have a very, very fast heart rate, it is obvious there is not enough blood to get into the heart to pump the head of blood out to the main circulation for normal activity, but when we get fibrillation in the auricle, the auricle trembles, it don't force blood in the ventricle, but it acts more as a reservoir and the ventricles pump and blood can

(Testimony of Dr. Homer P. Rush.)

go out in the body, and then we can have auricle fibrillation for years. There is some dangerous clots that form inside here, and if they can push a clot out, but if that happens to the ventricle, which is really the pump, the auricle—or the auricle that receives the blood or the pump, but, now, if we have a fast mechanism at the ventricle or this irregular type of beating—that is not a beat—or a quiver in the muscle, those are [321] carried out as though the ventricle is at a standstill, and that is—with a ventricular fibrillation, that would be a serious one. Now, one more and I'll—we can also have blocks in these impulses so that the impulses cannot get through this nerve system of the heart like it should, and that can produce standstills in the ventricles, where it just stands there, there is no vibration, there is no movement of any kind, and clinically or physiologically speaking, that would be the same thing as a ventricular fibrillation, and if the two of them did it, if it would happen in the same place neither one of them would put any blood out, but this is a different mechanism that initiates it. I think that takes up the general run, if I made it halfway clear.

The Court: I think we will take a recess. Now, it's almost twelve. Will two o'clock be all right?

Mr. Kriesien: Yes, sir.

Mr. Beebe: Before we take a recess, may I offer these 40 and 41 for the purpose of clarity and to illustrate the doctor's testimony?



(Testimony of Dr. Homer P. Rush.)

Mr. Kriesien: No objection to it on the basis of illustration.

The Court: It will be received.

(Documents previously marked Plaintiff's Exhibits 40 and 41 for identification [322] were thereupon received.)

(Whereupon, a recess was taken until 2:00 o'clock p.m. of the same day.)

(Pursuant to recess, proceedings were resumed at 2:00 o'clock p.m., November 28, 1956.)

The Court: You may proceed, Mr. Beebe.

Q. (By Mr. Beebe): Doctor, before the adjournment for lunch, we were discussing the serious arrhythmias. Are any of those incompatible with life?

A. Yes.

Q. Which one?

A. The one that would stop the heart. Ventricular fibrillation is also incompatible with life if it lasts long enough. Ventricular flutter would not be compatible with life, although I think it would be fair to say that there would be more chance to recover from it, but if it would last too long, it would be an ineffective rhythm, and ventricular tachycardia if it were fast enough would not necessarily be incompatible with life. That doesn't change it over to one of the other irregular rhythms which it is very apt to do, and if the rate were not fast enough to require the individual—for life, I have seen ventricular tachycardia go for 32 days



(Testimony of Dr. Homer P. Rush.)

and the patient still recover. Auricular fibrillation which is an irregular rate, now, you have the ventricle working [323] and the danger with auricular fibrillation is the damage to the ventricle because of the fastness of the beat or the damage of casting off a clot that is formed inside the heart when it doesn't have a full beat, and of course, that clot could form in some other part of the body and produce sudden death.

Q. Now, Doctor, when you say that ventricular tachycardia isn't necessarily incompatible with life, unless it changes over to one of the other arhythmias, which arhythmias are you speaking of?

A. Ventricular flutter or ventricular fibrillation.

Q. Now, what are the signs and symptoms of ventricular tachycardia?

A. Usually, ventricular tachycardia starts suddenly and has a very fast rate, so that you'd have a very fast pulse in there, some place around 220 would be a common one, and the blood pressure may hold about the same unless it gets to going fast enough, and then the blood pressure would tend to fall. A person would have a sensation of anxiety, sense of insecurity usually in their chest, as though something isn't right. They may not have pain if it is long enough, and fast enough, they will have pain out of the fatigue mechanism, and the deficient coronary flow, and then again it depends upon how much strain it puts upon the heart muscle, and gradually the heart muscle becomes more and more fast, and it becomes [324]

(Testimony of Dr. Homer P. Rush.)

less and less effective, and we get these symptoms as described due to passive congestion. If it's of short duration, and I mean about—I mean by that a matter of seconds to minutes usually they only notice the palpitation, signs of anxiety, possibly a little disturbance or feeling in the chest that something isn't right, and usually some nervousness or anxiety or fear and sometimes they will show a fast pulse.

Q. Now, Doctor, what are the symptoms and signs of ventricular flutter?

A. I think you'd almost have to discuss ventricular flutter and ventricular fibrillation together, because they tend to be so closely associated, and neither of them are compatible with life with having the ventricle beat sufficient enough to carry on normal circulation, and so we think of both of them as really causing almost the same physiological phenomenon as a ventricular standstill. It is the activity of the muscle, it is more than a quiver and not a beat, therefore the blood is not circulated, so that one gets first a sensation of weakness, maybe some dizziness, and in a matter of three to five seconds they usually will get a distinct pallor or cyanosis with tendency toward cold, clammy pallor is the most common, but they can become reddish and then if it goes on longer, about ten seconds, we begin to get unconsciousness. It may come on sort of as a spell, I mean by that, a little [325] fade-off, and then maybe not quite complete at the end of about 20 seconds they will usually become unconscious, and

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during this time the pulse disappears, blood pressure disappears and the patient will begin to develop shortness of breath. Now, if this is all there is to it, usually by this time we will have stertorous breathing, and we will have cerebral anoxia and the patient will take a few gasps and the patient dies from cerebral anoxia. If an individual has had reasonable circulation before, and possibly there has been some possibility of blood flow—but still, there must be some, because they can go on up to approximately eight minutes, after which I don't believe there has been any known recoveries. Some of them will develop convulsions when they go on into that stage, they will develop evidence of oozing in a matter of about 20 seconds—I mean by that where the fluid part of the blood, it again begins to leak throughout the capillaries and so forth.

Q. Doctor, how soon after the commencement of ventricular flutter or fibrillation or heart stop asystole does the stertorous breathing commence?

A. That would depend a little bit upon rapidity. When you say flutter, fibrillation, you have got to remember what is meant by that, and the graduation between ventricular flutter and ventricular fibrillation, and if it is ventricular fibrillation, if it is a pure fibrillation and nothing else, probably death would occur in approximately less than a minute [326] and a half. Stertorous breathing would probably come on in less than 20 seconds. There is some ventricular tachycardia, that is, some part of the time there is an occasional breath, and you are

(Testimony of Dr. Homer P. Rush.)

getting some blood there, and a slow rate and slow output, that would go on probably up to as high as ten minutes. Now, the longest that I have ever seen it in a patient has been approximately eight. It's frequently reported that asystole or a lack of any blood flow—there never has been a recovery in over eight minutes. Now, I have never seen anybody go that long and have a recovery.

Q. Doctor, I will hand you Exhibits Number 16 and 20 in evidence and ask you if you have examined those? Those are the electrocardiograms of Mr. Lyons, one of them dated 1950, and one of them February, 1953.

A. I have examined both of them.

Q. Do they show any evidence of any heart abnormality?

A. In my opinion, no. The one that was taken in 1950, there is a technical error, obviously mixed up the left and right arm leads which reverses the polarity of the electrode, so it is negative, and in lead one and lead two and lead three become reversed, which seems obvious here, but assuming that to be correct, this would be a normal electrocardiogram.

Q. They had the machines mixed up?

A. Yes, they had the electrodes for the left and right arm reversed. The one taken on February, '53, is a perfectly [327] normal electrocardiogram, I would think, it shows no abnormality of any significance.



(Testimony of Dr. Homer P. Rush.)

The Court: Of course, those electrocardiograms are by no means foolproof, are they, Doctor?

The Witness: They know the electrocardiogram as one of the instruments with which to help them in their diagnosis. It is an instrument to aid us in diagnosing. This is not a diagnosis, but there is some part in it that is very, very helpful.

The Court: No, I have in mind, I have heard of people who had electrocardiograms and come out perfectly normal and the next day they dropped dead.

The Witness: Your Honor I have seen people in which electrocardiograms was taken that was normal and they dropped dead within ten minutes after it was finished. An electrocardiogram by itself is not the whole answer.

The Court: May I see that?

(Document handed to the Court.)

The Witness: It will be noted in that first electrode, they had a lot of A.C. difficulty, of course that is purely a technical thing, here it's 60 cycles.

Q. (By Mr. Beebe): Now while the Court is examining those, as a matter of statistics can you tell us what the percentage of heart abnormalities will be ordinarily disclosed by an electrocardiogram? [328]

A. Well, when you use the words heart abnormalities, it makes it a little difficult for me to know just what you mean. For instance, the electrocardiogram will discover all arrhythmias; ectopic beats, or



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beats of other than normal origin, as I say, the heart may not have the proper functions and things of that kind, and of course it is very accurate, but those are not all serious heart conditions, and people with normal hearts as regards functions may show ectopic beats which electrocardiograms will show, but it would be a harmful heart, but it would not be a normal heart, the electrocardiograms will not show anything about valve lesions per se. It will only show the indirect effect. Electrocardiograms do show us in a high percentage of cases, now, of evidences of coronary circulation, provided the individual has been under an adequate strain before the electrocardiogram is given, which has improved our knowledge on it, considerably.

Q. Will an electrocardiogram show a significant enlargement of the heart, for example?

A. An electrocardiogram will show evidence of ventricular hypertrophy or evidence of the position of the heart or the rotation of the heart, but one then has to realize that you must know what hypertrophy means. In other words, it does not per se tell you that your heart is enlarged due to this. It doesn't measure the ventricular hypertrophy to begin with, the electrocardiogram, you know, does not measure the heart [329] beat, it measures the wave of excitation that goes over the heart muscle that precedes the beat. After a man is dead, you can get evidence of ventricular fibrillation waves going over that heart for 10 or 15 minutes and the heart not

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moving. That can be done experimentally and has been done many times.

Q. Now, Doctor, have you examined the translation of the medical report of the autopsy that was translated by Dr. Christen?

A. I examined most of it, I did not quite get to finish it during my lunch hour.

Q. Would you finish reading it, Doctor, please? You were familiar with the prior translation; were you not, Dr. Rush? A. Yes, I believe I am.

(Document handed to witness.)

Q. Dr. Rush, you notice that the autopsy states as a conclusion, that the primary cause of death is an acute aortic insufficiency. I will ask you if, in your opinion, there are any medical facts or evidences which are reported in the autopsy, which in your opinion justify the conclusion of acute aortic insufficiency?

A. No, it would not. My opinion is that there is not a description of the aortical that would justify a conclusion of aortic insufficiency.

Q. Now, Doctor, what would an autopsy reveal, or what in [330] your opinion would an autopsy have to reveal to justify the diagnosis of coronary insufficiency?

Mr. Mize: If the Court please, I object to the question as calling for the opinion of this witness as to what somebody else would or would not put in an autopsy.

The Court: I don't think the question is that, as

(Testimony of Dr. Homer P. Rush.)

I understand your question is, what would the autopsy have to reveal?

Mr. Mize: All right, thank you.

Mr. Beebe: Yes, in order to justify diagnosis of acute coronary insufficiency.

The Witness: I would expect an autopsy to state that the aortic valve——

Mr. Mize: If the Court please, I move that the question and answer be stricken on the grounds that he would expect the autopsy to state.

The Court: Well, the question is, what would an autopsy have to show in order to confirm the diagnosis, is what counsel is asking you, is that right?

Mr. Beebe: Yes, your Honor.

The Witness: I believe that an autopsy should show that the aortic valve should have evidence that they could not or did not close. If I could have a piece of paper, I could probably make myself clearer.

Mr. Mize: I think that's clear enough, your Honor. [331]

Mr. Beebe: Doctor Rush, did you want to make a diagram to show——

The Witness: I was thinking maybe I could make it clearer if I could diagram it, what aortic insufficiency is, what changes you would look for in a valve, and what they might show in a diagram on that, so that you would know what my terms meant that I was using, because I have found out this, sometimes my terms are not as clear as I think they are to other individuals. I think we could put

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them right on the bottom of this (indicating) if nobody would object.

Mr. Beebe: In order for the Court to see them from where you are going to be, Doctor, we should probably make a new one.

The Witness: Well, just put it down here (indicating).

Q. (By Mr. Beebe): Can you make them big enough so the Court can see them?

A. I think so. If we would take and look down from above on the valve—in other words, as though one were just going to let my fist represent it and my finger represent the ventricle, and where the aorta goes out up here (indicating) where my finger is representing, we are going to cut it across so we can look down on it, and we would get a round area where this goes out, and the semilunar valves are three, so that looking down on it, we would see some such picture. This would be the ring about the valve, and I am going to [332] put an opening here—well, we can't do that—skip that. Now, these valves are really little cusps so that we could put in this type of a protraction and so we would find that these are little cusps that look like this (indicating); they are fastened to the edge here (indicating) around the edge of the aorta and there are three in the center. When the heart pushes the blood up as the aorta shows, that forces these valves up in this position, and the blood can freely flow out, when the force below—because the heart now relaxes—disappears secondarily, we will get a back pressure



(Testimony of Dr. Homer P. Rush.)

from above and I will mark aorta—A or two over more on this side diagram, and that catches in these cusps and brings the valve closed. And when we look at it from above, it looks as they are now. The insufficiency means that this valve cannot close due to some reason, therefore you would expect to see either this valve deformed so that we would have a valve that would be scored or crinkly, retracted, have nodules on it, and leave some kind of a hole that cannot be filled in so that it doesn't come together, so that there is a hole in here or that the edges of the valve do not come together, so that we would have the valve that would close in this approximation, leaving gaps in between, because this had widened out too much or some disease produced, had pulled it apart too much. Now, the description pathologically used, of course, describes these things from the description used [333] in this pathology stated that this valve was stiffened and hardened. Now, that merely would mean that it's stiff, and normally if it's retracted, that is it's pulled, that is it's open, the cusps are pulled apart, that ring is stretched in order to pull the cusps apart. There is no statement made that would indicate that, but was there complete closure of the valve. It merely says stiffened and hardened by plaques, but I would think that there might have been atheromatous deposits or plaques along here, and along the vessel, but I couldn't take that to mean that it had pulled that valve or deformed that valve, and I think any



(Testimony of Dr. Homer P. Rush.)

pathologist would have certainly in one terminology or another, if he saw a deformity to the valve.

Mr. Kriesien: I move to strike that portion of the witness' testimony concerning his opinion as to what this Mexican autopsy revealed or should have revealed for him to arrive at an opinion that this condition of the valve did not exist.

The Witness: I don't think I made myself clear——

Mr. Kriesien: And the question that was asked him was what would you expect to find on an autopsy to have an aortic valvular insufficiency, and not his opinion as to whether this particular autopsy report is sufficient to indicate such a condition.

The Court: Well, I am going to sustain that objection.

Q. (By Mr. Beebe): Now, Dr. Rush, would you please step [334] down and number these diagrams that you have made?

A. We will call this first one number four in a circle; five with a circle; six with a circle; and seven with a circle; and eight with a circle.

Q. Now, Dr. Rush, referring to the diagrams, and particularly figure number five, what kind of a situation does that show; I mean, is that a rheumatic heart or syphilitic heart?

A. No, sir. That's the type you would expect for endocarditis or in a rheumatic heart, or bacterial endocarditis.

Q. And number six?

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A. More the type you'd describe, or find in a syphilitic or rheumatic heart.

Q. Now, number four?

A. That was a normal—corresponding to a normal valve.

Q. Number eight?

A. Is the impression I would get a valve would look like that was supposed to be hardened and stiffened with atheromatic deposits, plaques on it.

Q. And number seven?

A. Another projection of how the valve works, the valve is being closed as related by position A with a circle around it, and B with a circle around it shows the valve opened.

Mr. Maguire: Your Honor ruled on that question. I merely wanted to suggest this, that conclusion must be based upon fact, if the findings are not sufficient to justify the conclusion, I think it's within the realm of propriety that an [335] expert may look at the findings made and express an opinion as to whether or not the findings support the conclusions.

The Court: I have no quarrel with that.

Mr. Beebe: No, the thing that went out, Bob, as I understand it was simply his reference to the Mexican autopsy in this, as not being responsive or proper. He had already answered the other question specifically about it; all that went out was his reference to what the Mexican autopsy found—

Mr. Maguire: If the conclusion has been sustained, I think we understand each other.

(Testimony of Dr. Homer P. Rush.)

The Witness: I think I misunderstood it, the way I stated—it was the way I used my language.

Mr. Mize: I move that be stricken from the record, your Honor, as not responsive to any question.

The Court: It is simply a voluntary statement. I am not going to regard it.

Q. (By Mr. Beebe): Now then, Doctor, have you studied the medical records which are in evidence, marked Exhibits 18 and 19?

A. I don't believe I know them by number.

Q. May I have the translation of the interrogation—Exhibit 14?

A. I have seen both of these reports, but I have not gone over them recently, and I am not familiar with what is in them. [336]

Q. Will you examine them, Doctor?

A. Yes, sir.

Q. Have you looked at both those exhibits?

A. I have looked at both of these, yes, sir.

Q. Now, Dr. Rush, for the moment I am going to ask you to assume certain things, ask you to assume the facts as shown by those, but before that, I am going to ask you about atheromatous plaques and ask you what those are?

A. Atheromatous plaques are little plaques that are under the lining of the blood vessels that are fat-like substance and have deposits of some of the electrolytes gradually replaced in them as time goes on, and calcium is finally deposited. Usually, when we speak of them, they are more or less yellowish

(Testimony of Dr. Homer P. Rush.)

linear to a small plaque-like character that are not very thick, slightly thickened, and of course can gradually increase. As they become more and more pronounced—there is one diagram that was here that shows them quite well.

Q. Now, Doctor, in your experience, is the finding of atheromatic deposits of the coronary arteries or deposits upon the aortic valve, is that an unusual or uncommon finding in men 49 or 50 years old?

A. I couldn't say—I am a clinician, not a pathologist, I have seen autopsies—it's been since 1926 since I did my last autopsy myself, I believe, and I have seen many of [337] those valves, but I would not, from my own personal observations know any particular statistical information. My feeling would be that it's not particularly uncommon.

Q. Well, Doctor, what is the state of medical science on that; is it usual or common to find some atheromatic deposits in a man of 49?

Mr. Kriesien: If the Court please, I will object to that question. This witness is testifying as an expert who is not familiar with the facts in it of medical science.

The Court: Objection sustained.

Mr. Kriesien: And I also request the response to the question be struck on the ground that the witness stated, he testified that he did not know of his own knowledge.

The Court: It may go out.

Q. (By Mr. Beebe): All right. Now, Dr. Rush, I want you to assume the following facts: Assume



(Testimony of Dr. Homer P. Rush.)

that Mr. Lyons was 49 years of age; a very active, dynamic, energetic business executive, who put a great deal of himself into everything he did in connection with his lumber operation, in which he went to the timber and conducted the inspection of it, the supervision of his operations; he operated a ranch where he raised black Angus cattle, and was interested in and participated in hunting and fishing; in the 1940's, that exact time being unknown, Dr. Raymond McKeown, a physician and surgeon of Coos Bay, Oregon, examined Mr. Lyons for a [338] life insurance policy and found no evidence of heart disease; in 1950, Mr. Lyons was walking across a dock or deck and suffered pain in his chest which was of a constrictive nature, radiating in through the arms, and he stated that he was unable to hold a telephone; Dr. McKeown did a heart examination and found no signs of any abnormality; in the examination, executed an electrocardiogram which was within normal limits and which you have seen, Exhibit Number 17 in evidence, and exercise tolerance tests wherein the heart was inspected before and after exercise, and no murmurs were noted; in 1950, Mr. Lyons suffered rib fractures and facial injuries in an automobile accident, he was treated by Dr. McKeown and he flew, after that, to Palm Springs and suffered a hemothorax, and later developed gout, for which he was treated by Dr. McBride, a surgeon who specialized in internal medicine in Palm Springs, California; Dr. McBride gave Mr.



(Testimony of Dr. Homer P. Rush.)

Lyons a thorough examination during 1950; a physical examination in the spring and fall of 1951 and in the fall and spring of 1952. Mr. Lyons never reported any symptoms of chest pain to Dr. McBride before an examination of February 4, 1953, nor did he ever mention gall bladder symptoms. There is no evidence in these examinations of high blood pressure, and the electrocardiograms taken on these examinations did not vary from the electrocardiograms taken later on February 4, 1953, and which you have seen, being Exhibit Number 20 in evidence; on [339] February 3, 1953, on the evening of the day Mr. Lyons returned from the extensive business trip, he complained of fatigue and went to bed, and that night had chest pains of a constrictive nature with radiation to the arms; on the following morning February 4, 1953, Mr. Lyons complained to Dr. McBride of constrictive chest pains radiating down the arms; giving a history of just having returned from a very extensive business trip which had involved a purchase of a ship, and which was a matter of importance to him; and Dr. McBride gave a cardiac examination and fluoroscopic examination, exercise tolerance tests, electrocardiograms, blood count and sedimentation rates with no objective physical symptoms of any cardiac conditions; Dr. McBride advised rest and relaxation; advised Mr. Lyons to go on the contemplated fishing trip; that he refrain from tramping through the fields or doing heavy labor or excessive work;

(Testimony of Dr. Homer P. Rush.)

gave a prescription for nitroglycerin, which he advised Mr. Lyons was to be taken in the event that he needed them; also, Doctor, assume the facts found by the Mexican autopsy and disregarding any professional opinions therein, consider and assume also the truth of your own testimony, and the conditions of your observations of Mr. Lyons, and the description of his death, and all the factual matters that you have testified to when you were previously on the stand; consider also all of the facts which appear from the history of Mr. Lyons and his [340] medical record as it appears in Exhibits 18 and 19, which you have just read; now, Doctor, making those assumptions and no others and disregarding any medical opinions of others that you may have heard sitting here in the courtroom, I am going to ask you a series of questions: First, do you have an opinion as to the condition of Mr. Lyons' heart prior to the fatal incident on February 10, 1953?

Mr. Kriesien: If the Court please, I object to the question on the ground and for the reason that it does not properly state the facts as revealed in the Mexican autopsy report. The question does not incorporate the facts of the occurrence. It erroneously states that there had been no complaints of this pain, constricting of the chest and radiation down the arms since 1953, and requests this medical expert to base an opinion upon findings of other doctors which is incorporated in their opinion as to the result of the examination.

The Court: Well, I think you specifically ruled

(Testimony of Dr. Homer P. Rush.)

that out in your question, you told him not to regard the opinions of anyone else, and the question is whether he personally has any opinion based upon his knowledge of the man's condition. I think that is a proper question.

Mr. Mize: May I supplement the statement, your Honor, in the hypothetical question it mentions the finding of Dr. McKeown, which was his opinion that there was nothing found [341] in the man at that time, and not in the hypothetical question, it has reference to the examination by Dr. McBride, and the two opinions, the one of Dr. McKeown and the one of Dr. McBride. Now, it is my position that that is certainly an opinion on an opinion and it doesn't state the clinical facts.

The Court: I am going to overrule that objection.

Q. (By Mr. Beebe): Now, do you recall the question? A. I think I do.

Q. Let the reporter read it. Read the hypothetical question, please.

The Witness: I know the question.

Q. (By Mr. Beebe): Well, all right. Do you have an opinion as to the condition of Mr. Lyons' heart prior to the fatal incident on February 10, 1953? A. I do.

Q. What is that opinion?

A. I felt that he had a normal heart.

Q. Now, by a "normal" do you mean a normal one for his age?

(Testimony of Dr. Homer P. Rush.)

A. I mean an average, normal heart for an individual 49 years of age.

Q. Do you have a medical—making the same assumption and no others, not including any opinion of anyone else, and the same assumption that I gave you; do you have a medical opinion as to whether prior to the fatal incident, Mr. Lyons was afflicted with any conditions by which his bodily health [342] was seriously attacked, deranged, or impaired or an alteration of his body or some of its parts to the extent that there was a disturbance or interruption affecting the vital function? A. I do.

Mr. Kriesien: If the Court please, I object to the question on the grounds heretofore stated, and that this individual has testified that his practice has been limited to clinical findings and must necessarily totally disregard the autopsy findings in arriving at a conclusion.

The Court: Overruled.

Q. (By Mr. Beebe): Do you have an opinion, Doctor? A. I do.

Q. What is that opinion?

A. Will you state your—I don't—

Q. All right. Do you have a medical opinion as to whether, prior to the fatal incident, Mr. Lyons was afflicted with any conditions by which his bodily health was seriously attacked, deranged, or impaired, or an alteration of his body or some of its parts to the extent that there was a disturbance or interruption affecting the vital function?

A. I do have an opinion.



(Testimony of Dr. Homer P. Rush.)

Q. And what is your opinion?

A. My opinion is that he had a perfectly normal acting heart for a man of his age. I could not see—or can see for no reason—or with the information I now have, any reason to [343] assume that he wasn't perfectly normal and healthy for a man of 50 years of age.

Q. Now, Doctor, when you say “what you know now”——

A. From what I have gotten from the records and from the Mexican autopsy report and from the electrocardiograms and from those two records that I was allowed to read.

Q. You mean—— A. Exhibit——

Q. 18 and 19? A. Yes.

Q. And is it based also upon the hypothetical question that I gave you concerning his history?

A. It is.

The Court: How well did you know Mr. Lyons, Doctor?

The Witness: I had never seen Mr. Lyons previous to the Saturday before his death.

Q. (By Mr. Beebe): You had just been invited to go on the hunting trip and met him for the first time?

A. Yes, I met him down in Los Angeles, the first time I saw Mr. Lyons.

Q. Now, making the same assumptions, Doctor, and no others, do you have a medical opinion as to the cause of Mr. Lyons' death on February 10, 1953?

A. I do.



(Testimony of Dr. Homer P. Rush.)

Mr. Kriesien: If the Court please, same objection on [344] the ground that the hypothetical question does not incorporate all the facts, and the testimony of this witness in his direct examination, and that it's apparent that he cannot have an opinion on this subject.

The Court: Overruled.

The Witness: I do have an opinion.

Q. (By Mr. Beebe): Your Honor, I overlooked giving the witness one thing, and I should like to give him that information now and ask him if his prior answers would have been the same. And I refer to counsel's exhibit of Dr. Serrano down south. I will put that in.

Mr. Kriesien: If the Court please, the document was handed to the witness. He has examined all of them.

Mr. Beebe: No, it hasn't been handed to him, counsel, and we all have a lot of things to do, and it is an error of mine, and I want the witness to have everything before him. Now, Mr. Kriesien went down to Mexico and examined—asked Dr. Serrano, the man who made the autopsy—some questions and he made some answers. I might explain to amplify the physical findings of the autopsy, and I'd like to have you read that, Doctor.

Mr. Kriesien: May I suggest that you give it to the doctor to read?

Mr. Beebe: Well, I was going to do that; I will hand it to the doctor. May it be stipulated, Mr. Kriesien, where it [345] says "gall bladder was filled

(Testimony of Dr. Homer P. Rush.)

with black fluid, and also there were found two gall stones one of one centimeter in diameter lodged in the junction of the cystic canal and the coledoco," that means the common bile duct?

Mr. Kriesien: So stipulated—now, just a moment. Now, what was our translation——

Mr. Beebe: Your translation——

Mr. Kriesien: Not mine, he said common bile duct, is that right?

The Court: That is my recollection of what he said.

Mr. Beebe: In other words, this one here says "coledoco" and if I recall the testimony of Dr. Christen, he said——

The Court: Didn't he call it a biliary duct?

Mr. Beebe: Yes, common biliary duct.

Mr. Kriesien: I will stipulate as to what he said.

Mr. Mize: Just a minute, I'd like to find out what Dr. Christen said, there is a definite discrepancy in what he said and what the translation was, and I believe it's rather important.

The Court: All right, let's find out where the discrepancy lies.

Mr. Beebe: Wherein do you claim the discrepancy is, I thought that that was also your translation, said that it was the cystic duct and the common duct?

Mr. Mize: Well, we are talking about some terms that [346] I am not familiar with, and I want to be sure we are right before we stipulate, that's all.

Mr. Kriesien: My recollection of the doctor's

(Testimony of Dr. Homer P. Rush.)

testimony is that the word "coledoco" meant common bile duct.

Mr. Beebe: That is my recollection. So it is stipulated then, that where the word "coledoco" appears, that means the common bile duct?

Mr. Kriesien: Correct.

Mr. Beebe: Doctor, will you examine the translation of Exhibit 14?

(Document handed to witness.)

The Court: We might take our afternoon recess now, while the doctor is going over it.

Mr. Beebe: Yes, your Honor, thank you.

Mr. Kriesien: Yes, your Honor.

(Whereupon, a short recess was had.)

The Court: May I inquire, gentlemen, how much longer we will be in the case, in the trial of this case?

Mr. Beebe: Your Honor, this will be, I believe, our last witness unless something unusual occurs, and there is one matter that we will reach a stipulation on, and that is in the event that plaintiff does prevail, attorney's fees are allowed under Oregon law as we understand it, the Court may fix those with or without evidence, and the usual stipulation is entered into. If the plaintiff prevails the [347] Court may fix that thereafter, fix that after it determines the primary issue in the case, either with or without testimony as to the work that was

(Testimony of Dr. Homer P. Rush.)

done, and I understand that such will be the stipulation.

Mr. Kriesien: That is correct.

Mr. Beebe: So that this will be our last witness, your Honor.

Mr. Kriesien: And we will have, I believe, three witnesses, your Honor.

The Court: Medical men?

Mr. Kriesien: Medical men, also.

The Court: Well obviously then, I am just trying to—I think I have a jury case to try Wednesday—is it Wednesday, Mr. Clerk? Do you think we could finish it tomorrow, possibly?

Mr. Kriesien: I don't know, your Honor. I'd hate to make such a representation, I think the cross-examination of Dr. Rush will be quite extensive.

The Court: All right, we will try to go right ahead with it.

Mr. Kriesien: We will try to expedite it.

Q. (By Mr. Beebe): Dr. Rush, you have examined the transcript of the questioning of Dr. Serrano by Mr. Kriesien? A. I did.

Q. I wish you to assume the answers given there in addition [348] to the other matter I have given you, to assume in this hypothetical question.

A. Did you ask me a question?

Q. No, I am asking you to assume that as well as the medical record and the hypothetical question I have given you. The question now is, after having considered this latest matter of Exhibit 14, would

(Testimony of Dr. Homer P. Rush.)

that change any answers you have given to the questions? A. No, it would not.

Q. Now, to return to the question I have asked you, based upon the hypothetical question; the medical record; your own testimony concerning the occurrence after you met Mr. Lyons up to and including his death; and so forth, all of those, do you have a medical opinion as to the cause of Mr. Lyons' death? A. I do.

Mr. Kriesien: We object on the grounds as heretofore stated.

The Court: Same ruling.

Q. (By Mr. Beebe): What is that opinion?

A. I think his death was due to the explosion of a shotgun.

Q. Now, will you explain your answer, including the physiology of Mr. Lyons' death and incidentally, Doctor, I might say that any of the charts that are in evidence or which we have over here, which you feel that you should use to make [349] your answer more clear, feel free to ask for them and use them.

A. Well, my conclusions are based upon the following chain of events. Now, first, from what I have been able to learn, and what I saw, I felt that Mr. Lyons was in normal health for a man of his age. I didn't say perfect health, I said normal health. He certainly showed no evidence of any limitations in activity that would incriminate the cardiovascular system. Nor have I heard anything that would change that opinion. He had an explosion



(Testimony of Dr. Homer P. Rush.)

of a shotgun which went off apparently close to the right side of his head, following which he went into some type of heart failure and died. It's my opinion that it was the chain of events as follows: First, the explosion of the shotgun produced reflex phenomena that affected the circulatory system and shock which comes from nervous impulses affecting the circulatory system that produced a change in rhythm in his heart, so that it undoubtedly would not be carrying on efficient circulation, but some circulation for a period of time, because he didn't die in a minute or a minute and a half, as I would have expected if it had been only ventricular fibrillation, but he did show the early marks of having developed passive congestion, which meant that he must have had a heart that was trying to work for some period of time. This gradually became more marked. His heart was unable to compensate [350] for the factors of shock, I believe come into the picture, irreversible shock, and he eventually developed a full ventricular fibrillation which of course produced death, because of cerebral anoxia which is true in any type—such type of death. I think the chain of events which was the primary cause produced shock and the heart failure. Both may come on together, which is followed by no efficient circulation, which would allow for some true heart failure or passive congestion which was undoubtedly aggravated and made an irreversible shock, and at the same time a complete arrhythmia ventricular fibrillation, probably, although nobody

(Testimony of Dr. Homer P. Rush.)

can tell. There was no electrocardiogram, but certainly he had a rhythm that was not capable of efficient cerebral circulation to sustain life, because of cerebral anoxia.

Q. Doctor, in connection with the shock and the lack of circulation, would you go into that a little more fully? It may be that you want to use those charts there that Dr. Chamberlain used the other day?

A. I don't—

Mr. Mize: May I ask a question? Is he continuing his answer?

Mr. Beebe: I am asking him to explain more in detail the effect of the shock and his circulatory disturbances from it.

Mr. Mize: He is through with his reasons for finding [351] such was the cause of death?

The Witness: No, I—

Mr. Mize: Because I want to interpose an objection.

Mr. Beebe: Oh, had you finished answering the question that I asked you?

The Witness: No, I merely got up and gave the chain of events that I thought occurred.

Mr. Mize: Then, I would ask, your Honor, that the answer of this witness be stricken from the record on the ground and for the reasons that we previously stated to the hypothetical question, and further on the grounds of the fact that the doctor is assuming certain facts to be, which are not in evidence; namely, for one, when the shotgun went off. We also have not been apprised as to what his

(Testimony of Dr. Homer P. Rush.)

findings were. There have been no facts, counsel has merely asked him from his knowledge and from what he observed. There is no evidence as to what he observed at the time, and I move that the answer be stricken.

The Court: Motion is granted.

Q. (By Mr. Beebe): All right. Doctor, will you please resume the stand, please? Would you give—now, let's see, that which was stricken, your Honor, does that relate only to the explanation which he has given? A. Yes, I think——

The Court: Yes, I think so, particularly with reference [352] to the discharge of the shotgun, because we have no means of knowing how the shotgun was discharged.

Q. (By Mr. Beebe): Doctor, do you now assume in your answer that the shotgun was discharged first, and commence with the next thing in the order, and then explain the reasons for your opinion that the explosion of the shotgun was the cause of his death.

Mr. Kriesien: If the Court please, I will object to his making an explanation in his opinion why the explosion came first, and not the heart failure came first, because it is contradictory, and you have asked him to explain the reason why in his opinion the explosion preceded it.

Mr. Beebe: No, he has testified, your Honor, in his opinion the cause of the death was a shotgun explosion.

(Testimony of Dr. Homer P. Rush.)

Mr. Kriesien: We objected to that and moved that it be stricken.

Mr. Beebe: Your Honor did not make that——

Mr. Mize: That was part of my motion, Mr. Beebe.

The Court: Yes, I struck that.

Mr. Beebe: Oh, you did strike that?

The Court: Yes. You see, the difficulty is, here this man who is going up a little hill, we find him under a mesquite bush——

Mr. Maguire: Your Honor, at that time he was not going uphill. [353]

The Court: Well, was on fairly flat ground; he had been there for some minutes. I just wanted to correct the record on that. Now, may I consult with counsel on that?

Mr. Beebe: Well, if your Honor please, your Honor was advising us of the difficulty.

The Court: Yes, I think we are all conscious of that difficulty, we don't know just what happened there. This man may have discharged the rifle; he may have had an attack first, and he may have, by some reflex action, pulled the trigger; the trigger might have become stuck on one of the bushes there, or something, we don't know the character of the bush, whether it was thorny or smooth, manzanita or something like that; we are left to conjecture about all these things.

Mr. Beebe: If your Honor please, I have an authority that I should like to submit upon that matter if I may; it was a Federal case where a man



(Testimony of Dr. Homer P. Rush.)

was seen to be driving his automobile and a witness saw him lying back without his hands upon the wheel, and the medical cause of death was a heart involvement. There was medical testimony that the death occurred as a result of injuries, an injury and shock when he hit the telephone pole, and the Court held that that erased a conflict in the evidence. Now, it is our—one of our theories here, if the Court please, that there had to be here an intense emotion, and that by a process of emotion, you see, and because of the surrounding circumstances and [354] what the man found, the only thing that would have precipitated that was the shotgun explosion, and therefore I think it would be proper for the Doctor, if he has a medical reason for believing or having an opinion that the shotgun went off first, to so testify.

The Court: Well, didn't Dr. Chamberlain go into that with considerable detail?

Mr. Beebe: Yes, he did.

The Court: He said, as I recall his testimony, that there was an intense emotional reaction, but I find that a little difficult to assume, because here is Mr. Lyons, he was an experienced hunter, a woodsman. Now, it seems to me almost incomprehensible that the mere discharge of a shotgun, unless in such close proximity to his presence, would have caused this tremendous shock, but ordinarily under ordinary circumstances it would be reasonable to assume that a man of Mr. Lyons build and his preoccupation with hunting, an outdoor



(Testimony of Dr. Homer P. Rush.)

man, that the mere discharge of a shotgun wouldn't normally cause him to have that kind of a reaction.

Mr. Beebe: Yes, your Honor, we agree with that, but we have further this situation, your Honor, we have the fact that it did discharge close to his face, because of the finding of the powder burns, the scratches, and it is common knowledge, something that is known in ordinary life, that the muzzle blast of a shotgun is a terrific blast, and could startle [355] and frighten a man, even an experienced hunter. When he gets powder burned and feels these superficial lacerations, he doesn't know exactly how badly he is hurt. He is probably disgusted with himself for ever letting this thing happen, and therefore we think it could be found that the intense emotion was brought on by the discharge of the muzzle close to his face. Now, I would agree that a hunter, an experienced hunter whose shotgun went off unintentionally and blew a hole in a bush or a fence post or something, probably would not get a severe emotion such as was testified to by Dr. Chamberlain. But we have the additional circumstances there is strong evidence in support to the effect that there was some wounding, that there were powder burns, that this went off close enough so that there were encrustations of powder upon his face, and lacerations, and the Mexican autopsy report shows or describes one hole in the forehead which went in under the skin, at least partly but not in the cranial cavity, so from which could be found something circular

(Testimony of Dr. Homer P. Rush.)

and round, a piece of wadding or possibly one of the shot, also hit him. Then, I think we have the situation here where an experienced hunter had a humiliating experience of this, also he sustained some injury, together with a very loud blast close to his head.

The Court: Well, let's go on with the examination. Your remarks now are, I take it, in the nature of argument. We [356] are not arguing the case, yet.

Mr. Beebe: Now, the answer to the question that the doctor's present belief that the explosion of the shotgun was the cause—so I will go back.

Q. (By Mr. Beebe): Doctor, do you have a medical opinion of the cause of Mr. Lyons' death on February 10, 1953?

Mr. Kriesien: If the Court please, I will object to that. The witness has already answered the question.

The Court: The question has been asked and answered.

Mr. Beebe: But your Honor struck——

The Court: I only struck that portion about the shotgun, if I understand my ruling, that is correct.

Mr. Mize: That was the basis of my objection to strike the whole thing, and your Honor did, as I understand.

Mr. Beebe: I see.

Q. (By Mr. Beebe): Now then, Dr. Rush, will you explain your answer without starting your

(Testimony of Dr. Homer P. Rush.)

explanation with the explosion of a shotgun near the man's face?

Mr. Mize: Ask him whether he could explain it without assuming that.

Mr. Beebe: Can you give an opinion without assuming the explosion of a shotgun as to the cause of his death on February 10, 1953?

A. That's a rather difficult question to answer, because I don't—I can give an opinion as to why I think the man died. [357]

Q. Without assuming the blast of the shotgun?

A. Well, I'd have to assume something started the chain of events.

Q. Well, start with the chain of events but leave out the blast of the shotgun close to his face. For example, if you believe that there was an intense emotion involved, start at that point. In other words, the point immediately following what you said about the blast of the shotgun.

Mr. Mize: I believe the witness has testified that it is very difficult and he can't render an opinion without assuming this condition, and I think the witness should be compelled, or the facts should be stated in the hypothetical question upon which the opinion is requested be stricken, as that has been the purpose of our objections all along. We don't know where we are going on these answers.

Mr. Maguire: Your Honor, I think in the argument perhaps we have gotten a little far afield.

(Testimony of Dr. Homer P. Rush.)

May I consult with counsel a minute? I think the last point of your Honor's ruling——

Q. (By Mr. Beebe): Well now, Dr. Rush, making the same assumption that I originally gave you in the hypothetical question, assume also the exhibits which have been shown you, including the electrocardiogram, Dr. McBride's records which are Exhibits 18 and 19, the Mexican autopsy report, the further examination of Dr. Serrano which you just read, and [358] assume also that during the time that you were with Mr. Lyons for the few days immediately preceding his death, that you were in close contact with him; that on the day before his death you saw him hook a large marlin and play and fight it under moderately severe exertion for a period of 30 minutes; that on the morning of his death, as you described it, he went up a hill walking in sand, and when he got to the top he showed no evidence of any distress or exhibited breathlessness; that thereafter you went to the hunting ground as you explained; that you heard—were standing about 60 yards away and heard shotgun blasts; that you saw two or three doves fall; that immediately following the last time you saw a dove fall, that there was another shotgun blast and you saw no dove fall, and that the sound of that shotgun blast followed more closely than had any of the other shots; that following this second shot by some 10 or 20 seconds you heard stertorous breathing from the direction that Mr. Lyons lay; that you went over to Mr. Lyons



(Testimony of Dr. Homer P. Rush.)

and found him lying face down under—partly under a mesquite bush with the barrel of his shotgun protruding from slightly beneath the left shoulder and the stock of the gun coming out from a point about by the right hip; that Mr. Lyons was then pulseless and cyanotic; that you rolled him over and you felt his chest and that you felt no regular heart beat; but a sensation such as like putting your hand on a purring cat, a purring sensation; that [359] about two or three minutes after you got there a white, frothy substance commenced to come from his lips; that it continued to come for some time, the stertorous breathing continued and the frothy substance at his mouth became somewhat pink; that about some four or five minutes after you had arrived there, the breathing stopped, and that you applied artificial respiration; further assume that at the time you saw Mr. Lyons under exertion on that ship without a shirt, that there was no sign of carotid pulsation in his throat; do you have an opinion as to the cause of Mr. Lyons' death, a medical opinion as to the cause of Mr. Lyon's death on February 10, 1953?

Mr. Kriesien: If the Court please, we object to the question on the grounds heretofore stated and on the further grounds that the question has already been asked and answered, although counsel proceeded to outline in detail the facts of which Dr. Rush had personal knowledge. The original question, he asked him to assume all of the facts



(Testimony of Dr. Homer P. Rush.)

that he had personal knowledge of. The question has been asked and answered.

The Court: I don't think it will do any harm to have it answered.

Mr. Mize: And if your Honor please, I wish to interpose an objection on the same grounds that we made in connection with the previous hypothetical question.

The Court: The record will show that.

Mr. Mize: May the witness be instructed as to the medical [360] cause of death?

The Court: Yes. Will you do that? Just give us the medical cause of death.

The Witness: Yes, that is my opinion, that this man died because of something that initiated a chain of events as follows: One, that his heart rhythm became disturbed so that it could not carry on effective circulation. Two, there is an element of shock with it. Now, the reason I believe both of those existed, is because the autopsy showed an enlarged liver and passive congestion of the lungs. It would take some few minutes before that could develope. I can be certain that he did not have it previously, because I saw him and he was breathing normally, he was not breathing hard until I came back, and I saw him lying on the ground. I believe shock was part of it because he was pulseless. Then his condition was cold and clammy when I touched him. I believe that he had this disturbance in the heart rhythm, because I could hear no heart tone with my ear on his bare chest. I could feel a

(Testimony of Dr. Homer P. Rush.)

tremulous type of activity in his chest. I know that it takes about 20 or 30 seconds before stertorous breathing will start after one has had cerebral pretty well cut down or cut off. I know that after we have a failure of circulation over a short period of time that it becomes marked or acute; that we can begin to accumulate the fluid passing out through the vessel walls in the tissues within 30 seconds. [361] Now, depending upon how acute, it could run probably up to three or four minutes before that might occur. I know with him, that he started his pulmonary edema, which is a fluid that comes out from the blood vessels, or we couldn't have got the fluid in the bronchi in such period of time, and I know by that time he was pulseless, and I know by that time that his circulation had been cut down to a very low ebb, and I know that his respiration stopped, and I believe that they stopped because of the cerebral anoxia that occurred because he had no blood from his shock to return to the heart, and he had passive congestion that damaged vessels and he had anoxia to his heart muscle that would keep aggravating the arrhythmia so that the process became irreversible and his heart finally went from fast ventricular tachycardia into ventricular flutter or fibrillation and asystole and death. And I think that we had involved in it—this was a rather unusual type of sudden death—inasmuch as it involved all four factors that we commonly find responsible for sudden death. They all seemed to be a part in this picture to me. That is

(Testimony of Dr. Homer P. Rush.)

the reflex phenomena that could produce shock and heart arrhythmia, passive congestion which the autopsy findings stated were present, the arrhythmia which I felt myself had to be present with the findings that I found when I was there. Yet, I know it could not have been only arrhythmia because he lived too long, and he couldn't have developed the pulmonary edema [362] and passive congestion had he died from just the arrhythmia. There would not have been the time element. I further believe that this is a rather unusual type of case and I can only draw the conclusions that the primary thing must have been the ventricular arrhythmia, because in sudden death that is caused by any strong emotional factor regardless of what it is. It's felt that ventricular arrhythmia and primarily fibrillation was also the cause of death, but we know that particularly now, myocardial infarction is responsible for it, but this man had an autopsy which showed that he did not have a myocardial infarction. So I then must assume that it was some strong emotional factor that initiated it, because the other factors were not there. Did that make it clear?

Mr. Kriesien: If the Court please, I now move to strike the foregoing answer on the ground and for the reason that he is assuming facts not legally established and in evidence.

The Court: No, I am going to leave that answer stand, counsel.

Q. (By Mr. Beebe): Now, Doctor, in your

(Testimony of Dr. Homer P. Rush.)

opinion, is it possible that a shotgun blast close to the face, which was sufficient to cause powder burns and scratches and wounds such as you described on your examination, is sufficient to bring about a state of medical shock such as you have described in giving your reasons for your prior answer? [363]

Mr. Kriesien: If the Court please, I object on the ground and for the reasons stated and for the further grounds that it requires this witness to assume a fact not legally established and would be based purely on conjecture and speculation.

The Court: Well, we do know that a blast of a shotgun was discharged.

Mr. Kriesien: That is correct, your Honor.

The Court: The only thing we don't know is the time element.

Mr. Kriesien: That is correct.

The Court: We do know that the shotgun blast was discharged. Now, whether it was before or after the seizure, we are left to speculate, but I am going to allow the question to be answered. You may answer it, Doctor.

The Witness: If I understood the question correctly, do I believe that the shotgun explosion could cause the shock, and in my opinion, it could cause it.

Q. (By Mr. Beebe): The corresponding medical shock, yes.

A. That is my opinion, that it could, yes, sir.

Q. Doctor, do you have any opinion as to



(Testimony of Dr. Homer P. Rush.)

whether the shotgun blast preceded any heart disturbance in Mr. Lyons' death?

Mr. Kriesien: If the Court please, I object to that question as falling in the realm of conjecture and speculation.

The Court: I don't think that the doctor's opinion would [364] be very helpful to me in a question of that kind, because frankly, without being—without intending any offense, Doctor, you speculated as much as we can——

The Witness: But I have an opinion on it, if that's what was asked.

Q. (By Mr. Beebe): I mean, based upon medical reasons, that you can sustain by medical reasons, Doctor, and not just by any guesswork?

A. That's what my opinion is based on, that's why I have an opinion.

Mr. Kriesien: I made my objection, and there has been no ruling.

The Court: I will sustain that objection.

Q. (By Mr. Beebe): Is there anything in the time sequence of events which would give you a medical reason or which would support a medical opinion as to the time of the blast with respect to the commencement of the fatal heart attack or heart failure?

Mr. Kriesien: Objected to on the grounds heretofore stated, and falls within the realm of conjecture and speculation, your Honor.

The Court: Objection sustained.

Mr. Maguire: Your Honor, this, in our opinion,



(Testimony of Dr. Homer P. Rush.)

and we may be mistaken, is rather important matter here, and I think for the purpose of the record, if your Honor will permit it, [365] that we would like to make an offer of proof on that.

Mr. Mize: May I make one other ground on my objection, your Honor, and that is that this would not fall within the realm of medical opinion?

The Court: All right, you may include that in it, but I believe I will allow Mr. Maguire to make his offer of proof.

Mr. Maguire: Shall we do it through the witness, with the witness on the stand on an offer of proof or shall we dictate it when the witness is not on the stand; I don't know which?

The Court: I think you had better put it in writing and hand it to me in the morning.

Mr. Maguire: We can do that.

The Court: May we take an early adjournment today, I have an appointment. We will adjourn until tomorrow morning at ten o'clock.

(Whereupon, at 3:45 o'clock p.m., November 28, 1955, an adjournment was taken until 10:45 o'clock a.m. of the following day. [366])

(Pursuant to adjournment proceedings were resumed at 10:45 o'clock a.m., November 29, 1955.)

The Court: Proceed.

Mr. Beebe: Dr. Rush, will you resume the stand, please?

(Testimony of Dr. Homer P. Rush.)

(Witness resumes stand.)

Q. (By Mr. Beebe): Doctor, I may have asked you this, I am not sure, I'd like to ask you one question. Going back to the events just before you found Mr. Lyons under the bush there on the occasion of his death, and referring to the last two shotgun blasts or explosions that you heard before the stertorous breathing can you estimate the amount of time which separated those last two blasts that you heard?

A. Yes, I can.

Q. What is your estimate, Dr. Rush?

A. Two—oh, two or three seconds.

Q. Now, Dr. Rush, I want to ask you some questions about the physical findings in the Mexican autopsy. The translation says, "When the sternum and rib cartilages were lifted, the chondro costal joints were found to be ossified." Is that finding significant in this case?

A. In my opinion, it would not be.

Q. "There were pleuro parietal adhesions of strong type in the posterior aspect of the sternum and left thoracic [367] cavity." Would that physical finding be of significance in this case?

A. I do not believe it would be of much significance, no, sir.

Q. "The right lung was found to be free." Would that be of any significance in this case?

A. No, sir.

Q. "Both lungs were found to be congested." Would that finding be of any significance in this

(Testimony of Dr. Homer P. Rush.)

case, Doctor?           A. Yes, I think it would.

Q. What, if anything does it indicate?

A. It would tend to indicate that passive congestion was present, to be one of the findings of heart failure.

The Court: What would bring that about, Doctor?

The Witness: You mean the congestion?

The Court: Yes.

The Witness: Oh, well, it could come from heart failure, and by heart failure, I mean anything that would interfere with the contractility of the muscle of the heart, so that it could not maintain normal circulation.

The Court: Would it also indicate a severe cold?

The Witness: I doubt it, the way it describes that, it would be indicative of a severe cold.

The Court: You did not observe him suffering from any cold at the time you went on the trip with him? [368]

The Witness: I did not, no, sir.

Q. (By Mr. Beebe): "On cut section, black liquid blood seeped out." Would that finding be of significance in this case, Doctor?

A. I think it would have the same significance that the other findings had.

Q. You mean the one that you just explained immediately previously?           A. Yes, sir.

Q. "The pericardium was found to be thickened and it had strong adhesions to the diaphragm."

(Testimony of Dr. Homer P. Rush.)

Would that finding have any significance in this case, Doctor?

A. It could have significance in this case. I don't know whether it did or didn't, because it didn't describe where these were. You see, there is quite a space between where the pericardium lies on the diaphragm—one condition in which it could definitely be significant.

Q. What condition do you have reference to which would make this significant in this case?

A. Well, in this case, I don't know that it was significant.

Q. Oh, I see.

A. You asked me if it could be significant.

Q. Well, in what way could it be significant?

A. If you had adhesions between the pericardium and the diaphragm, and those adhesions are in the region of where [369] the big veins from the lower part of the body come into the chest you can get a condition that we speak of as "adhesive pericarditis," and such a condition in that particular location could produce a syndrome that we speak of as Pick's syndrome, which is due to damming back of the vein coming from the abdomen of the blood and it produces passive congestion in the lower extremities, usually first, as opposed to normal passive congestion from heart failure that usually goes to the liver first and then into the lower extremities second.

Q. Now, Dr. Rush, do you have in mind the facts

(Testimony of Dr. Homer P. Rush.)

I asked you to assume yesterday in the hypothetical question?      A. I do.

Q. Including the record, excluding the opinion and so forth, is there anything in that which gives any indication that Mr. Lyons had Pick's syndrome?

Mr. Kriesien: Another objection to the question on the grounds heretofore stated, that the hypothetical question does not set forth the facts upon which the opinion is predicated.

The Court: Well, counsel, if there is anything contained in that autopsy report which is based on objective findings, I think it would be admissible.

Mr. Kriesien: I think that is correct, sir.

The Court: And I think that was the pinpoint of your question, wasn't it? [370]

Mr. Beebe: Yes, sir, your Honor. What the doctor has testified is that if these adhesions had been in a given place, that they might have some significance, and now I am trying to find out if on the facts—other facts in the case, the clinical history and so on what was given to him in the hypothetical question, there was any other indication which might tend to throw light on the question of whether Mr. Lyons had Pick's syndrome as Dr. Rush just explained it to the Court.

The Court: I will allow the question.

The Witness: No, in my opinion he had no evidence to indicate Pick's syndrome.

Q. (By Mr. Beebe): Thank you, Doctor. "The



(Testimony of Dr. Homer P. Rush.)

heart was surrounded by a dense coat of fat tissue." Is that fact of significance in this case?

A. In my opinion it would not be of any particular significance.

Q. Why not, Doctor?

A. There are many people that have a reasonable amount of fat on the pericardium, and that of course is the covering that encases the heart, and unless that amount of fat be enough to interfere with the heart function, I don't believe it could be considered of significance.

Q. The next question, Doctor, is: "The left ventricle was slightly hypertrophied." Is that finding of significance [371] in this matter?

A. I would think that that would have some significance, yes, sir.

Q. And what significance does it have?

A. That would indicate that the left ventricle of the heart had had a little extra work to do over this man's life, probably within recent years and therefore had hypertrophied or thickened in order to do that amount of work.

Q. The next statement is, "The semicircular valves of the aorta were thickened and hardened with atheromatous deposits." Is that finding significant in this case?

A. I don't think that is of any more significance than the left ventricular hypertrophy would be.

Q. Now, Dr. Rush, to the statement about the left ventricle being slightly hypertrophied, does that fact carry with it any implication of a danger of a

(Testimony of Dr. Homer P. Rush.)

sudden serious or fatal heart incident initiated or precipitated by some internal cause?

A. No, it does not.

Q. Now then, the statement, "The semicircular valves of the aorta were thickened and hardened with atheromatous deposits." Doctor, in your opinion, does that fact carry with it any implication of danger of a sudden serious or fatal heart incident initiated or precipitated by some internal cause?

A. No, it does not. [372]

Q. "Mitral valve was slightly dilated." Is that of significance in this case?

A. I don't believe it is of too much significance, no, sir, because that is something that could have occurred at the time of his death.

Q. Does a finding on post-mortem that the mitral valve was slightly dilated carry with it any implication of danger of a sudden serious or fatal heart incident initiated or precipitated by some internal cause?

A. It does not, in my opinion.

Q. "The coronary arteries were dissected and they were found to have a diminishment in their caliber due to the presence of atheromatous plaques." Doctor, is that finding of significance in this case?

A. It's rather a difficult question to answer, because it doesn't give one any idea as to how much; one would presume that it couldn't have been terribly extensive, or they would have stated the amount of diminishment.

(Testimony of Dr. Homer P. Rush.)

Mr. Kriesien: If the Court please, I move that the answer of the Doctor, that they would have so stated, be stricken from the record on the ground that he has no way of knowing what they would have stated.

The Court: The motion is granted.

Q. (By Mr. Beebe): Now, Doctor, does that statement carry with it any implication of immediate or danger of a sudden serious or fatal heart incident initiated or precipitated by [373] some internal cause?      A. My opinion——

Mr. Kriesien: I object to that question, your Honor, on the ground and for the reason that there is no showing as to what degree there was any obstruction and the Doctor has already testified that he doesn't know. Therefore, whether it would pose any danger or not is not within the realm of this Doctor's testimony at this time.

Mr. Maguire: I'd like to call your Honor's attention to the subsequent examination made by Mr. Kriesien of the Mexican Doctor; in which they said they could not measure it. I think that of itself, it can't be measured, it cannot be of any particular size. I think that adds to that with what is in the statment that the Doctor made.

Mr. Kriesien: To correct you, Mr. Maguire, the answer was not they could not measure it, that they could not state how much it measured.

Mr. Maguire: Well, counsel, I heard it was impossible to say——

Mr. Kriesien: Impossible to say, correct.

(Testimony of Dr. Homer P. Rush.)

The Court: The objection will be sustained.

Q. (By Mr. Beebe): Now, Doctor, assuming the facts that I gave you in the hypothetical question yesterday, and assuming the facts shown in the medical records which are in evidence and the other facts shown in this autopsy, the facts which [374] you yourself saw and related with respect to Mr. Lyons' appearance and activity throughout the time you were with him, and including his activities on the morning of his death, and the facts which you have related and which are in evidence concerning the events of Mr. Lyons' death, and disregarding any opinions of any other experts, do you have an opinion as to whether or not the matters which I have just mentioned to you from the autopsy, taking into consideration the clinical history and all the other matters that I have asked you to assume, do you have any opinion as to whether those things taken together carry with them any implication of danger of a sudden, serious or fatal heart incident initiated or precipitated by some internal cause?

Mr. Kriesien: If the Court please, we will object to that question on the ground that the hypothetical question does not incorporate the facts upon which the witness is asked to express an opinion. Also it is apparent that the medical autopsy did not show the extent of the diminishment of the coronary arteries and for that reason we do not believe that this witness is in a position to answer the question as propounded.

The Court: I believe I would like to hear the Doc-



(Testimony of Dr. Homer P. Rush.)

tor's thinking on that particular question; I will overrule the objection.

The Witness: It would be my opinion that there was—will you state the question again? I have lost my continuity [375] of it.

The Court: Will you read it, Mr. Reporter?

(Question read.)

The Witness: Yes, I have.

Q. (By Mr. Beebe): And what is that opinion?

A. It would be my feeling that there is no evidence to show an internal cause could have precipitated it.

Q. Well, I don't think that answered my question, Dr. Rush. My question was whether all those facts taken together and assuming the man was still alive, if you knew those facts would they carry with them any implication of danger of a sudden, fatal heart incident initiated or precipitated by some internal cause?

A. In my opinion, they would not.

Mr. Kriesien: Just a moment, I will object to that question as the witness has already answered it.

The Court: The answer may go out, but I will rule on the objection. The objection will not be overruled pending my ruling on the objection.

The Witness: It would not.

Q. (By Mr. Beebe): Dr. Rush, would you explain the reasons for your answer? Could you give the Court your medical reason for that answer?

A. Yes. If we take the history of this man as



(Testimony of Dr. Homer P. Rush.)

given in the records that I was shown and has been given in testimony here, [376] he has no story that would suggest any heart strain, except the possibility of his two episodes of chest pain. Now, the first one occurred in about 1950; the next one was in 1953. The first one, apparently there is only one episode according to what the records show, was a pain across the chest going to the arms associated with a weakness in the arms. He had no recurrence of such a pain for three years, so it would be very difficult for me to feel that we could consider that as an angina type of pain due to coronary insufficiency, and have no recurrence with the active life that this man lived for three years as regards his business and as regards his activity and his emotional tensions that he worked under; the business deals that he had. Second, it would be very unusual to have an angina type of pain from coronary insufficiency produce weakness in the arms. It is possible if he had severe enough pain for an individual to be weak, but I can't imagine how it could just choose the arms. The next fact is the fact that he had this pain in 1953 which came on after a very strenuous several days of emotional activity and I don't know how much physical activity was mixed up in that, it isn't stated, there is no statement made in there as to what precipitated this pain, and an examination made at this time, as was also true after the first one, revealed no findings objectively that were stated. It could—the Doctor could have seen that the heart was acting abnormally. Now, pulse [377]

(Testimony of Dr. Homer P. Rush.)

can be counted; blood pressure can be taken; heart size can be determined—as I understand fluoroscopic examinations were done, particularly after the second one; fluoroscopic examinations were done on this man twice a year in 1951 and '2, and certainly if there had been any particular change, the same man having done these fluoroscopies should have been able to detect them, so I would have to feel that there was no physical evidence to indicate there had been any change in his heart between 1950 and 1953, and even after his second episode of pain, we do not have any indication that it had to be an angina type of pain. There are many things that give chest pain. He had no other cardiac symptoms that are recorded in the record any place that I saw. His blood pressure had run within normal range taken several times, his pulse, I think, was, on one or two occasions, reported as being a little bit fast, which anybody might have with pain or particularly with excitement or with worry, and I don't believe that it would have much more significance than that. It would be hard for me to feel that he could have had any serious heart involvement. He had the same findings over a period of three years, had no evidence of any heart strain during these few days I was with him, and we were on a small ship, so that we saw each other very frequently. I saw him work for at least a good 30 minutes trying to land a big fish. I know it was physical effort, and quite severe physical [378] effort, because I saw him tug and pull, and yet, following this, there was no

(Testimony of Dr. Homer P. Rush.)

change in color, no cyanosis nor pallor. There was no distention of the neck veins. The man had no short—he had no shortness of breath, he complained of no pain of any kind. In fact, the only thing that seemed to irk him was the fact that he had lost the fish. Following this, he carried on perfectly normal activity the rest of the day and must have felt very good, because it was his idea that we get up early the following morning to hunt doves, and I believe if he had been tired or fatigued, he would not have been so enthusiastic about it, and the next morning when we got up and went ashore, he hiked around the countryside, including a small hill with no obvious evidence of short breathing, certainly he didn't complain of pain, because I was with him when he was doing this walking. I don't think he was as short of breath as I was on walking up that hill, so when you put all those facts together, it just don't make it possible for me to feel that something sudden was going to happen right then, because there was no change in the pathology in his heart within that five minutes. Now, I would feel that if this man had had some coronary insufficiency, because of the atheromatous plaques in his blood vessels in the heart, that would have been the cause of his death, that we'd have expected to have found evidence of an acute coronary involvement of some kind, such as a coronary occlusion with [379] thrombosis, and I mean an organic occlusion, and——

Q. Will you let me interrupt you? Will you describe what you mean by an organic occlusion?

(Testimony of Dr. Homer P. Rush.)

A. I mean by that, that it is a substance in the artery so that the blood cannot get through. There is plenty of blood present, but it cannot get through it.

Q. What kind of a substance would that be, Doctor?

A. It most commonly would be a clot, and as stated the autopsy certainly did not find any organic clot.

Mr. Kriesien: If the Court please, I move that that answer be stricken from the record on the ground that according to the autopsy report they did not or do not find such a clot.

Mr. Beebe: Well, Mr. Kriesien, it is your questions which I have which are assumed, and I don't think it takes a Doctor to read the translation with regard to the record.

The Court: The mere fact that there was an absence of a clot is noteworthy; isn't it?

Mr. Beebe: Yes, and the Mexican Doctor specifically said, on examination by Mr. Kriesien, that there was no evidence of anti-mortem clot.

Mr. Kriesien: That is correct; I withdraw my objection.

The Court: Overruled.

The Witness: So that I don't know of any——

Q. (By Mr. Beebe): Pardon me, Doctor, for the interruptions. [380] I didn't hear the miocardial infarction.

A. There was no evidence of miocardial infarc-



(Testimony of Dr. Homer P. Rush.)

tion that one would expect to follow a coronary thrombosis, therefore——

Q. Oh, Doctor, pardon me for interrupting you, but what is a miocardial infarction; will you describe it for the Court, please?

A. A miocardial infarction is an area of tissue that has been killed, you might say, or dead tissue because of a lack of blood supply going to that particular tissue, so that a miocardial infarction would be an area of heart muscle that literally has died or become destroyed.

Q. What is the common cause of that, for the Court?

A. Coronary insufficiency? Well, the common cause will be a coronary thrombosis, you can get it from anything that will decrease blood supply adequately fast enough.

Q. Now let me ask you one question, and then you can continue your answer. Are those things that you have just mentioned, coronary occlusion with infarction and thrombosis, are they sudden death matters?

A. They can be, in fact they quite commonly are and I would have expected that the autopsy should have shown some of those factors if the cause of his death was due to, as you stated, an internal reason with the material that has been given me as regards what his physical findings showed, what his history showed, and what the autopsy showed. Now, [381] if we realize that in sudden death we have two factors that are so effectively involved, particularly in



(Testimony of Dr. Homer P. Rush.)

the type of sudden death this man had, one of them being a coronary involvement, as I have mentioned, coronary occlusion and the thrombosis and miocardial infarction, which by itself can produce a change in heart rhythm of a serious nature, that would lead to death. It could also produce shock, which I believe this man had evidence of. It could also produce passive congestion if the man lived long enough for circulation to be maintained that long, but all of those which this man had, there was no miocardial infarction shown, so I don't know how to explain why the heart went into its obvious asystole or change of rhythm so that this man died of any mechanism as regards having its origin suddenly on the inside.

Q. As regards any internal origin; is that it?

A. Yes.

Q. Now, Doctor, with special reference to the matter of the gallstones, I believe that the autopsy shows that there were two gallstones, one, one centimeter in diameter which was located at the union of the systic duct and the common bile duct, the other of three millimeters was in the fundus and it was testified by Dr. Serrano when Mr. Kriesien examined him, that both of those gallstones were free. Now, in your opinion, do the presence of those gallstones or any of the [382] facts shown in the autopsy concerning the bile and so forth, the 40 centimeters of bile, in your opinion are they—are those factors of significance in this case?

A. No, in my opinion they are not.

(Testimony of Dr. Homer P. Rush.)

Q. Will you give your reasons, Doctor?

A. Yes. My reasons are first, according to the history that was given in this clinical story by the two doctors who had examined him, Dr. McKeown and Dr. McBride, he had no story of digestive disturbances. Second, he had no story of jaundice or anything that would suggest that the gallstone had ever blocked the common duct. He had no history of pain that would suggest gallbladder pain, unless those two episodes of pain mentioned could have been due to the gallbladder. He was on a perfectly normal diet while he was with us, and didn't stay away from the ordinary foods we'd expect to upset a gallbladder, if he had gallbladder disease. I think it's further pretty well established that there are many people that have gallstones in an autopsy that never had a symptom and never had any trouble from them. I know that it is not uncommon in women of middle age that have had children, the old axiom used to be "fair, fat, forty, and female," that never had any symptoms and yet you frequently will find stones at autopsy. They never had any heart trouble that the gallstones might have caused.

The Court: Isn't it a fact, that if the stones are not [383] large enough they would dissipate themselves by the absence of fats and other substances in most cases?

The Witness: I don't believe that has been very well established, your Honor, that a stone will dissolve itself.

The Court: At any rate, with a fat-free diet, if

(Testimony of Dr. Homer P. Rush.)

they were relatively small, they would give no particular trouble; isn't that correct?

The Witness: I think that is correct, and I think it is further correct that it doesn't necessarily—or in fact, I would feel that the bigger the stone, the safer it would be, because a big stone in the gallbladder is going to stay there. If they are smaller, they may go out in the duct.

The Court: Well, I tried a case one time where a gallbladder was revealed on autopsy had completely hardened the whole bladder. Is that an unusual situation?

The Witness: That would be a rather unusual situation there, because calcium deposits into the wall of the gallbladder, and it would be a little bit unusual because the stones are made inside.

The Court: All right, pardon me.

The Witness: Gallstones are made of cholesterol stones and of calcium stones and then we have the third one, the mixed stone, and it further stated that these were free, and if they were free then it means that they must not have [384] been caught in the ducts to have produced any particular reflex trouble, or we'd have expected to have found, if they were bound down, particularly the location of a bile stone in such a position, and be free—I might be able to demonstrate that better with a diagram——

Mr. Beebe: May I have this marked for identification?

The Clerk: Plaintiff's Exhibit 42.

(Testimony of Dr. Homer P. Rush.)

(Document was thereupon marked Plaintiff's Exhibit 42 for Identification.)

The Court: I think before you begin the explanation with your diagram, we will take a short recess.

(Whereupon, a short recess was had.)

The Court: All right, proceed.

Q. (By Mr. Beebe): Doctor, you were about to explain to the Court the physiology of this gallbladder matter.

A. Well, I thought possibly it would be easier. Now, he stated the stones were in—this drawing of the gallbladder which is shown here, that I will put a number one on with a circle around it is the gallbladder itself. Now, number two which is circled with an arrow pointing to it, shows the cystic duct. Number three, which we will label the same way shows the hepatic duct, and number four which we will label the same way shows the common bile duct. Now, this is drawn according to scale being six times above average. I mean this takes an average gallbladder—this has been [385] enlarged six times, so we will just make a note up there six times, so that it will give an idea of the comparison of sizes. This was those two gallstones which were just put in here (indicating), it is not the position that they were stated—I am going to label them by calling this, one, supposed to show—suppose we leave it there, so I will label this one A with a circle around



(Testimony of Dr. Homer P. Rush.)

it which is the big one, and I will label this one with B, which is the little one. Now, as stated the big one was one centimeter or ten millimeters in diameter, and that the small one was three millimeters in diameter. The small one was supposed to be in the fundus, where it is located. The big one, however, was stated to be at the mouth of the cystic and common ducts where they come together, which would have placed this stone in this position, which I am showing an arrow which we will put down here the position of A. It was also stated to be free, which is hard to imagine, but it is true we do have this irregularity on the lining which is extended down into the mouth here (indicating) and undoubtedly it must have been enough to have held it in this spot, and by free must mean that it was not impacted in, and as the man never had jaundice, it must mean that it never got out here to block the hepatic duct. The man never had gallbladder pain, unless these two episodes of pain that he had was gallbladder pain. It could not have very well blocked any of these ducts to [386] any appreciable degree or we would have had pain from the contraction of the duct attempting to remove the stone particle. Now, I think that explains the location of where the autopsy says it was, and the comparative sizes.

Mr. Beebe: May the Court please, plaintiff offers Plaintiff's Exhibit 42 for the purpose of illustrating the testimony of Dr. Rush on this point.



(Testimony of Dr. Homer P. Rush.)

Mr. Kriesien: No objection for the purpose of illustrating.

The Court: It will be received for that purpose.

(Document previously marked Plaintiff's Exhibit 42 for Identification was thereupon received.)

Q. (By Mr. Beebe): Now, Dr. Rush, is it possible for a gallbladder disturbance—oh—before I ask that, is 40 ccs. of dark green bile an abnormal finding in a gallbladder?

A. No, it is not.

Q. Now, Dr. Rush, is it possible for a gallbladder disturbance to initiate some sort of a reflex which would cause an arhythmia of the heart?

A. Yes, it is.

Q. Now, returning to the hypothetical facts in the matter you have been assuming, Doctor, and assuming all of those things and with special reference to the gallbladder situation [387] which you have discussed, do you have an opinion whether it is likely or probable in this case that any gallbladder disturbance initiated any arhythmia of Mr. Lyons' heart on the occasion of the fatal incident?

A. Yes, I do have an opinion.

Q. And what is your opinion?

A. It is my opinion that it did not.

Q. And just to shorten it up, Mr. Kriesien; what would your reasons be, the ones you have explained suggest to explain this gallbladder?

A. My reasons for what?

(Testimony of Dr. Homer P. Rush.)

Q. For your opinion that you gave us.

A. All right.

Q. All right, Doctor, will you give your reasons for that opinion?

A. Yes, the reasons for my opinion are as follows: That this man gives no story of having had gallbladder disease. He gives no story of having had any gallstone symptoms. He gives no story of having had a dilated or distended viscus like we'd expect to get if you were going to reflexly have a gallstone involvement or an arrhythmia of the sympathetic or parasympathetic nerves to the heart.

Q. Now, then, Doctor, a few moments ago you were testifying and you defined what you meant by an organic coronary occlusion. Is there some other kind of organic occlusion? [388]

A. The word properly used would, of course, would mean an organic coronary occlusion, but if you don't have an adequate amount of blood going to the heart such as, we'll say a big hemorrhage, so that there is no blood can get to the coronary, you will have the same thing that you would have with an organic occlusion, or one could describe that as a functional occlusion, if you wish.

Q. Now, Doctor, will you explain what you mean by the term "coronary insufficiency"?

A. Coronary insufficiency means that there is not an adequate amount of blood going through the coronary artery to take care of the nourishment of the heart muscle at the time that the heart muscle needs that nourishment. Now, that is a long way

(Testimony of Dr. Homer P. Rush.)

around, but what I mean is a heart that is working needs more blood than a heart that is not working, and where you would not necessarily have to have a coronary insufficiency if it was getting adequate blood at rest, and yet if you would have this individual exercise and his heart did more work, then the artery might not get the amount of blood where you could have a coronary insufficiency at that time, such things as hemorrhage or shock, in which there is not enough blood gets to the heart to be pumped out into the aorta so that it can fill the coronaries without a functional affair, such things as a true narrowing, if it were narrow enough so that it couldn't take the amount of blood needed [389] would be an organic insufficiency. I think you might liken it to an irrigation ditch, that ditch needs a certain amount of water, and if somebody puts a dam in the ditch, why, you have got the water where it can't go through, but on the other hand if the ditch itself is not big enough, you would have the same thing.

Q. Your reference to your first one, would that be organic?

A. The first one would be organic and the second one would be functional.

Q. Now, if the Court please, I wish to put a question to the witness which probably would bring about an objection, because it will seek to elicit an answer upon the shotgun. I wish to do it, because it occurs to me that with the further foundation that has been laid, it may be admissible, and if it is not,

(Testimony of Dr. Homer P. Rush.)

I should like to make it in the form of an offer of proof, if I may.

The Court: That is the matter we discussed yesterday?

Mr. Beebe: Yes, your Honor.

The Court: Do you have it written out?

Mr. Beebe: No, your Honor, I didn't. I got busy working last night, and I did not get to that. I apologize to your Honor, but I worked until three o'clock in the morning, but I did not get it written.

The Court: Well, that's all right, I would suggest that the Doctor be excused temporarily while the offer of the [390] plaintiff is made.

Mr. Beebe: Yes. Then I will have no more direct examination.

The Court: Will you step out, please?

(Witness leaves courtroom.)

Mr. Beebe: May the Court please, the plaintiff respectfully offers to prove as follows: The witness would be asked to assume the same facts which he has been assuming in his testimony in this case, and he would be asked to state whether he has any opinion as to whether there were any outside or any external forces other than the last shotgun blast which he heard, which could probably have initiated the fatal heart incident of February 10, 1953. If permitted to answer the witness would say that he has an opinion, and if asked what that opinion was, he would testify that in his opinion there was no other incident, other than the last shotgun blast that he



(Testimony of Dr. Homer P. Rush.)

heard which likely or probably initiated the fatal heart incident of February 10, 1953.

The Court: Well, counsel, it occurs to me that that matter has been adequately covered by the Doctor.

Mr. Beebe: I think it has been covered by a process of elimination, it has, and now in our effort to make a full presentation, we simply want to present it in the positive form, and we are making our offer of proof for the record.

The Court: I think I am afraid of that question, counsel, [391] I think I would be afraid for the record, too. I think that it has been adequately covered by a process, as you have suggested, of elimination, possibly by sort of a negative approach, but I think I have a complete understanding of the Doctor's reasons for that, and the offer of proof will be denied.

Mr. Beebe: As a matter of fact, your Honor, under the circumstances, the plaintiff will withdraw her offer of proof.

The Court: All right. Mr. Crier, will you get Dr. Rush?

(Witness resumes stand.)

Mr. Beebe: I have finished the direct examination.



(Testimony of Dr. Homer P. Rush.)

Cross-Examination

By Mr. Kriesien:

Q. Dr. Rush, I'd like to have you describe with particularity the material facts upon which you predicate your opinion that you gave that the condition of Mr. Lyons' heart was normal for a man in his age range.

A. Well, I don't know that there would be anything different than what I stated before. There is a man that by autopsy showed apparently some atheromatous plaques in his coronaries, apparently had some on the aortic valve. They state the aortic valve was stiffened and hardened. They state that he had a slight amount of ventricular hypertrophy. Now, I think it's very fair to say in a man of 48 to 50 you can find those things in a reasonable majority of people, and I don't believe [392] that one can state that that's particularly out of the realm of what might be expected in that age group. There are very few people or very few autopsies that I have seen, and I think I have checked hundreds of hearts, that I haven't found some atheromatous plaques in the aorta or the valves and under the coronaries in that mid-age group. It does not state that there was any thrombosis or sclerosis. It doesn't state there was any miocardial infarction. It does not state there is any evidence of fibrosis as though there had been chronic lack of nourishment. It does not state that the valve leaflets were de-

(Testimony of Dr. Homer P. Rush.)

formed. It does not state that the aorta itself was dilated. It does not state that the coronary arteries were interfered with in any way, so it should have been able to function as a normal heart, and must have as this man had no symptoms, had no physical findings that were demonstrated on at least—there were seven examinations that are recorded, and I just have to assume that with a complete negative history, completely negative physical examination, normal electrocardiogram, normal fluoroscopic examination—in fact all of his lab work was normal, except on the uric acid which showed the gouty condition which he had, and it was normal, of course, part of the time it was being treated—I would think that one would consider it a normal heart for the age group.

Q. Dr. Rush, those were dead individuals that you examined [393] their hearts, and they had died of some heart condition?

A. Yes, or other conditions; they weren't all heart deaths.

Q. And, Doctor, I wish you would state with particularity the facts upon which you predicate your opinion as to the medical cause of Mr. Lyons' death, namely, the emotional reaction, medical shock, and into ventricular fibrillation and death. The facts upon which you base that opinion?

A. I believe we can definitely state this man had a serious cardiac arrhythmia, and that's stated upon my own personal findings at the time of his death. When I saw this man he was still alive, he was un-

(Testimony of Dr. Homer P. Rush.)

conscious, he was cyanotic, he showed stertorous breathing, and he gradually developed pulmonary edema. He was pulseless. I was unable to hear any heart tones with my ear against his bare chest. I had no stethoscope. I was unable to feel any heart beat with my hand on his chest. I did feel that I felt somewhat of a tremulous type of movement underneath his chest when I first saw him. Now, he lived for a few minutes after I saw him. I would feel that he must have had some circulation or he couldn't have lived that long. It couldn't have been a ventricular fibrillation all the time or he couldn't have lived that long, and I don't believe he could have had the same chain of symptoms. I think if he had had a ventricular fibrillation from the very start, that he would have suddenly fainted or become unconscious, go into stertorous breathing [394] probably within a matter of 20 to 30 seconds, probably not lived over a minute and a half, and probably would have had no pulmonary edema, and probably would not have developed as much cyanosis as he did, and certainly would not have lasted the period of time that he did. So, he must have had some circulation to produce the passive congestion which was shown by the autopsy, namely, the enlargement of the liver and the changes described in the lungs. I feel that in a sudden death of that type, there are two reasons why it occurs out of a clear sky. One is a miocardial infarction due to a coronary thrombosis, and that is not an uncommon finding, and it is followed by a serious arrhythmia, and not in effect

(Testimony of Dr. Homer P. Rush.)

ventricular fibrillation. It's because of that finding that Dr. Levine advised that quinidine be used to try to prevent such a complication. That was not done on this man's autopsy, therefore something else must have produced it and the other common causes, and when I say common causes, remember that ventricular fibrillation itself is not too common, so that none of these causes will be too common, but emotional tension, of which loud noise has been reported as being one cause, pain, emotional strain or tension caused by any sudden type of reaction, such as an individual that might be a soldier, which I believe is the parallel you used, wouldn't have such an attack when he was going over the top facing the gunfire, but he might well have such an attack when he got home after [395] he had been through such an affair and had relaxed——

Q. Dr. Rush, I don't want to interrupt you; in your giving the common causes of ventricular fibrillation, I'd like to have you restrict yourself to the facts insofar as possible.

A. Well, I said that I thought loud noise——

Q. You have emotional tension and then you have pain that you have raised as two of the common causes; what are the other causes?

A. Well, we stated that miocardial infarction as a result of the coronary thrombosis is the first one.

Q. I was asking about the other common causes.

A. Reflex phenomena is probably more common, is reflexes from the back of the throat or gastrointestinal attacks, although I assume other reflexes



(Testimony of Dr. Homer P. Rush.)

could do it. Certain drugs such as toxic doses of digitalis can do it; quinidine has been known to do it; certain irritating gases; pulmonary emboli. I think that covers it.

Q. What do you mean, Doctor—well, I don't want to get into that right now. Those are the other common causes of the occurrence of ventricular fibrillation?

A. They are the majority of them.

Q. All right, continue, Doctor.

A. I couldn't swear that I might not have forgotten one, but that is the ordinary things.

Q. Continue, Doctor. [396]

A. On what?

Q. You were giving a recital of the facts upon which you based your opinion. Is that all the facts?

A. Oh, no, I thought you asked me about ventricular fibrillation.

Q. No.

A. That's the way I understood the question. Will you read the question again then, please?

(Question read.)

A. Next, as stated, I believe the arhythmia was quite definitely shown by what I saw and felt myself. Next is stated he did not die immediately or he could not have developed the passive congestion which he had. Third, there was some element of shock present. Shock can come from a coronary thrombosis and a pericardial infarction, but as stated, again, the autopsy doesn't show that he had



(Testimony of Dr. Homer P. Rush.)

it, so that something else must have precipitated the shock and also caused ventricular fibrillation, so that we had an individual here that has a negative past history, normal physical findings on several physical examinations, normal electrocardiograms, normal fluoroscopic examinations are reported, and autopsy findings such as slight left ventricular hypertrophy, atheromatous plaques on the coronary vessels, and hardening and stiffening of the aortic valve, some dilatation of the mitral ring and the other findings that go with passive congestion, and gallstones. [397] The two gallstones that have been mentioned, I don't believe any of those are etiological facts, for I think that passive congestion was a result and not a cause. There is nothing reported about the miocardium or the heart muscle showing any degenerative change nor fibrosis nor changes that would suggest that it had been a heart under poor nourishment from coronary insufficiency in a chronic way. There was no dilatation that one would expect if the heart had been under strain very long, so it must have lost its nourishment quite rapidly, and having those factors, plus, as I stated, negative factors on the physical side and history in life, it would seem to me that we would have to explain it on the basis of some outside emotional or outside cause for an emotional upset of some kind. I don't know of any other way to explain it.

Q. Well, then, Doctor, as I understand it, to attempt to shorten your explanation, you base your opinion on a negative past case history and the au-

(Testimony of Dr. Homer P. Rush.)

topsy findings and what you observed at the time of the occurrence; is that substantially correct?

A. And negative electrocardiograms and fluoroscopic examinations.

Q. That was included in my negative past case history. A. O.K.

Q. Now, when did you first ascertain the negative character of the past case history of Mr. Lyons? [398]

A. I don't know that I can answer that question. I don't recall when I first—I got bits of it from the very start from the pilot who had been close to Mr. Lyons for years and was very fond of him, was the one that stayed with him, with the body after this happened, and the rest of them went back to town, to the ship, and in talking to Bob Lyons, he told me——

Q. Bob who?

A. Bob Parrick, I am sorry, and he stated he had no illness, that he had always been strong, couldn't imagine how it could happen to this man; he couldn't understand how it could happen, so that I began to get my first information about it within the first 15 or 20 minutes, and with an individual who had lived quite close to him as an associate, and it was gradually added to by the information I got later by contact with his other doctors.

Q. As a matter of fact, you were advised by Mrs. Lyons that he had been checked over by Dr. McBride and that he was in generally good health?

A. That's right.

(Testimony of Dr. Homer P. Rush.)

Q. When did you first obtain Dr. McBride's medical case history file?

A. Shortly after this occurred, and proceeded to misplace it, and it was not found again until a short time—well, I have forgotten just exactly when it was, it was not too long ago. [399]

Q. Did you read it when you got it?

A. No, I never did; I looked it over when I got the electrocardiogram and I was going to study it, and in the meantime due to some moving, it was misplaced. In fact, I thought it was lost.

Q. But did you go through most of the file, Doctor?

A. I—since then, yes, sir.

Q. I mean at that time?

A. No, I didn't at that time.

Q. Then do I understand you merely looked at the electrocardiogram?

A. No, I probably glanced at the other phases of it. I didn't go through with any particular care as regards drawing a conclusion or anything from that, or having any information to what treatment he had had and whether he had been examined twice a year; I didn't know that until I read Dr. McBride's deposition.

Q. When did you read that the first time?

A. About—within the past month, I presume, maybe not that long ago.

The Court: May we take our recess now? Two o'clock, counsel.

Mr. Beebe: Yes.

Mr. Kriesien: Yes.

(Testimony of Dr. Homer P. Rush.)

(Whereupon, a recess was taken until 2:00 o'clock p.m. of the same day.) [400]

(Pursuant to adjournment, proceedings were resumed at 2:00 o'clock p.m., November 29, 1955.)

The Court: Proceed, gentlemen.

Mr. Kriesien: Dr. Rush, I believe before lunch that you had testified that shortly after the occurrence you had Dr. McBride's medical case history or file and you had made some examination of it, and had not examined the deposition until some time shortly before this trial? A. Right.

Q. Is that a correct statement, that shortly after the occurrence the only information you had concerning the condition of Mr. Lyons' health was your observation that he appeared to be an energetic individual, not under any particular strain from exertion of marlin fishing or from tramping through these hills; he appeared to be in good health and you received the same information from Mr. Parrick, and in addition did you have the findings of the Mexican autopsy report?

A. No, I did not have the entire findings of it, I had a short note that was given me after we had made six or seven trips up to get it, which I assume is sort of a death certificate, the note I had to take to the Governor in order to get permission to take the body out of the country, and in that it stated, I



(Testimony of Dr. Homer P. Rush.)

think there were one or two or three statements, I mean I have forgotten just exactly what they were, but [401] I think it said aortic insufficiency and maybe coronary insufficiency and maybe superficial gunshot wounds. I don't recall just exactly the way it was worded, but it was the only thing I had seen until then.

Q. Now, with the exception of having read Dr. McBride's deposition and having examined the Mexican autopsy report as to the findings, what other material information have you gathered since the occurrence?

A. Since the accident?

Q. Since the occurrence?

A. Yes, since the episode occurred, is what you want to know?

Q. Yes.

A. Well, I seen the electrocardiograms——

Q. Well, just a minute, Dr. Rush. I believe you testified that you had the electrocardiogram and Dr. McBride's file and the deposition?

A. One of them, I think this is correct, I looked at previously. I believe there were two of them there, and I believe the second one may have been in this big envelope that he sent up, but I only recall of seeing the one previous to when I went over this with him the other day.

Q. And which one was that, do you recall?

A. That was the one that showed the technical defect, the one there was a mistake in hooking up the arm leads.



(Testimony of Dr. Homer P. Rush.)

Q. That would be the one in 1950. Well, I will ask you—— [402]

A. If you just open them, I can just tell you from here because it is so obvious. Yes, sir, that's correct.

Q. The 1950 one?            A. Yes.

Q. All right. When did you first examine the electrocardiogram of February 4, 1953?

A. I don't know that I can give you that date, it was comparatively recent. Maybe I can make myself clearer and save some of these questions. These were sent up to me by Dr. McBride and they were in a large envelope. At that time I was moving my offices. That went into a group of other papers in a file and I couldn't find it and didn't find it for months, and I believe my wife went through all this material that I had taken home and put in my basement, that I had taken to sort before throwing it away, and found it, and I don't believe that was more than a few weeks ago. I don't recall just when that was. Then, that material included Dr. McBride's notes and some letters—no, let's see—there was some information about Mrs. Lyons in there which was in the same envelope. I sorted it all apart and put all of that that pertained to Mr. Lyons in a clip and gave it to Mr. Beebe, and I did not have—even go over it carefully until later.

Q. Did you say that was a few weeks ago, did I understand you to say? [403]

A. Shortly, I don't know just exactly.

Q. Well, Doctor, just to refresh your memory,

(Testimony of Dr. Homer P. Rush.)

I was furnished with this information, I believe, in November or December of the year 1953; is that correct, Mr. Beebe?

Mr. Beebe: Yes, that is correct. It was at your request I obtained them from Dr. Rush and furnished them to you, and they were in your possession for some time while you had them copied.

Mr. Kriesien: You made them.

Mr. Beebe: Did I make the copies or you?

Mr. Kriesien: Yes.

Mr. Beebe: Well, in any event it was either the last part of 1953 or early part of 1954, if that statement is correct.

The Witness: Well, I am certain that we didn't find those that were mixed up in the other files in my basement until later in 1954.

Q. (By Mr. Kriesien): Well, could it have been in 1954 then?

A. I don't really——

Q. Was it prior to your giving a deposition in December?

A. I don't believe it was. My memory was that it wasn't, but I couldn't be certain of that either. All the records one goes over, I just don't remember it.

Q. Now, Doctor, a few questions on the factual matters of the occurrence. You had known Mr. Irwin, Mr. Lyons' partner [404] for a good number of years?

A. I had known Mr. Irwin for several years, yes, sir.

(Testimony of Dr. Homer P. Rush.)

Mr. Beebe: If your Honor please, I made an error in my statement that it was in the latter part of 1953 or the early part of 1954. I assumed that Dr. Rush's deposition was taken in early 1954. I observe in fact, it was in January, 1955, so it occurs to me that when I furnished you with those, Mr. Kriesien, was shortly before the date of the deposition, perhaps a month or so, and I want to amend the statement that I made to that effect.

Mr. Kriesien: I believe that is correct, Mr. Beebe, we are both off a year there.

Q. (By Mr. Kriesien): Dr. Rush, I believe you testified that Dr. Chamberlain and you and Mr. Lyons were together at the scene of this occurrence, and that Dr. Chamberlain left. Now, Dr. Chamberlain testified on his direct examination that you had been placed up on a hill to where doves would light in a tree, or words to that effect, and he stayed with Mr. Lyons for some 10 or 15 minutes waiting for some birds to come over, and he left to go to the city. Now, does that refresh your memory?

A. Well, that isn't exactly the way things happened. I might have been placed there while Dr. Chamberlain was there, there may have been some doves come over while Dr. Chamberlain was there, but then it ended up—the fact is that Mr. Lyons and [405] I were together right alongside the roadway when the doves really started to come over, and I was moved by the Mexican up towards a tree that was closer to the city than Mr. Lyons was stationed. If I recall Dr. Chamberlain's testimony

(Testimony of Dr. Homer P. Rush.)

correctly, he said that I was further from the city than Mr. Lyons. Well, I wasn't when the accident happened; I may have been when Dr. Chamberlain left.

Q. Was Mr. Lyons hunting from the road?

A. No, he was off the road at the time by a distance of probably—oh, some place between 10 or 20 or 30 feet.

Q. How long had you and Mr. Lyons been separated prior to your hearing the two shotgun shots that we are speaking of?

A. Oh, I don't believe over a matter of 10 or 15 minutes, that again is an assumption.

Q. Now, during that period of time, I believe you testified you could not see Mr. Lyons?

A. That's correct.

Q. And you would have no knowledge of what he was doing during that period of time, insofar as movement or exercise was concerned?

A. No, I would not.

Q. I believe your testimony was that he had moved from—some 30 yards from the point where you left him to the point where you found him in the unconscious state?

A. I don't recall just what the distance was or what I may [406] have said, but it was something in that neighborhood of, I would think, 10 to 30 yards.

Q. Now, Doctor, you seem to place a considerable stress on the time element of the events that occurred, and I would like to have you relate those



(Testimony of Dr. Homer P. Rush.)

time elements with the best degree of accuracy that you can.

A. Well, as I told you previously when I gave my deposition, I was purely estimating them the best I could. These, I am certain of, and that is there was at least one or two doves that Mr. Lyons shot that I saw fall after I was in my new station. I had my back to him at the time, but when I'd hear an explosion, I'd look around and see a dove fall. These were on the wing, as they were coming over as he was shooting them when this double shot occurred; the ones that were close together was much closer than the other two or three shots that had been fired and, as I stated, I saw no dove fall but I had my back to him, and I could well have missed them, but the time element was very short, because the reason—because of this .22 rifle I had, I'd been placed in a position that if I shot at a dove that would light in a tree, I knew I couldn't hit a dove on the wing with a .22 rifle, and I was aiming at one in the tree when he shot a dove, and the dove fell, I was a little aggravated because immediately the doves left the tree and they made one circle and came on back again, and I got ready and another shot was fired, and [407] a dove fell, then before I could even turn around to holler, which was my intention at the time, the second shot went off and it occurred very close after the first of these two double shots.

The Court: Was he shooting at the birds on the wing or on the tree?

The Witness: On the wing.



(Testimony of Dr. Homer P. Rush.)

Q. (By Mr. Kriesien): A shorter period of time, did you say, very short?

A. I wouldn't say it was over two or three seconds between the first and second shot, that again I am merely estimating as best I can.

Q. And is that your best estimation?

A. Yes, that is the best approximation I could make.

Q. Now, were these doves flying over Mr. Lyons at rather a high altitude or a low altitude?

A. They weren't particularly high, no.

Q. And you had your back to Mr. Lyons?

A. Yes.

Q. You could hear the explosion of the shotgun and turn around in time to see the dove fall?

A. That's right.

Q. But you don't know whether a dove fell on the last shot or not?

A. No, I didn't see whether a dove fell, I didn't see one. [408]

Q. You had your back turned?

A. I had my back turned that way.

Q. All right. Now, how long after the last shot was the lapse of time until this stertorous breathing developed?

A. Well again, as I have told you, I don't exactly know. It wasn't very long; it was a comparatively short period of time; it was a longer period of time than it was between those two close shots—I have tried to think back and base it on something if I could, and my reason in estimating that time, I

(Testimony of Dr. Homer P. Rush.)

recall, was I thought at the time trying to figure out about how long it might take to do the acts that I could recall doing, I made an estimation of some place between five and ten seconds, I imagine. Now, it might have been 15 seconds. I don't believe it was shorter than five, and don't believe it was longer than ten to twelve.

Q. Doctor, how long a period of time is it normal for the development of stertorous breathing in an individual?

A. An individual with asystole which it has been——

Q. Now just a moment, explain it in just laymen's terms, if you will?

A. Well, an individual that has been hooked up to an electrocardiogram so that you could see what was going on in the heart, and whose heart stops beating, there is no indication which is physiologically the same as a ventricular fibrillation would be. I think you will even find in the literature that [409] sometimes asystole is described as being standstill or fibrillation of the ventricle, in approximately 20 seconds, it can develop. Now, it's going to vary with people depending upon how fast is the rate as regards the arrhythmia. Now, I made the term asystole, and I have had the experience of having an electrocardiogram connected to a patient going through Stokes-Adams seizures and I have got a record that shows the time. It can be measured, and I have seen it develop in a matter of 20 seconds with asystole.

(Testimony of Dr. Homer P. Rush.)

Q. Is that the minimum?

A. It's the minimum that I have ever seen, but I don't know that it couldn't be sooner than that.

Q. Well, from the time elements you have given me, Dr. Rush, from the shot to the stertorous breathing, you said five to ten and not over twelve. Now, something must have occurred prior to that shot to cause the stertorous breathing if it cannot develop within less than 20 seconds, is that correct?

A. All I can tell you is the way I saw these things and the way it appeared to me.

Q. All right. Now, does that type of breathing also develop pulmonary edema?

A. I think that it's the other way around, pulmonary edema might follow that.

Q. All right. How long did it take you to get from your spot some 60 yards distant down to where Mr. Lyons was? [410]

A. Oh, I—approximately some place like walking a block, I presume, I hurried—I don't know—half a minute, maybe.

Q. Now, you say half a minute?

A. I said maybe. Again, I am estimating as best I can.

Q. All right. Now, you say you hurried. What was the occasion of your hurrying, Dr. Rush?

A. I heard this second shot, then when I began to hear this noise, the stertorous breathing, I wondered if it was—it sounded more like the snorting of an animal—it came from the direction where I

(Testimony of Dr. Homer P. Rush.)

knew Mr. Lyons was and I wondered if he had shot him an animal, that's why the second quick shot, and was possibly in trouble because of one of these wild bulls or something come down, as we had seen cattle in the country not far from us.

Q. So, for that reason you hurried to where he was? A. That's right.

Q. I believe on your deposition, you testified generally, did you not, Doctor, that you came down when you were wary of encountering an animal?

A. That's correct.

Q. And you were looking for a tree to climb and that sort of thing?

A. That's just what went through my mind.

Q. When were you thinking about those things, during that period? [411] A. That's right.

Q. And you believe it was still a 30-second period of time? A. The best I could judge it.

Q. All right then. When you arrived and found Mr. Lyons, I believe you testified that he was cyanotic, pulseless, and unconscious, lying under a tree?

A. That's correct.

Q. Now, what did you do then, immediately?

A. Looked down and I noticed blood on one side of his face and felt that he had shot himself and hollered—I think the first thing I did was holler for help, because I knew that these other hunters were in the neighborhood that were in our party and then looked down and took his pulse and attempted to roll him over a little so I could

(Testimony of Dr. Homer P. Rush.)

get a better look at him, and in the meantime other members of the party arrived up to where I was.

Q. How long a period of time elapsed?

A. Again, I am presuming, purely guessing, a matter of—I suppose another—maybe ten seconds before the Mexican got there and maybe it was another 20 or 30 seconds to half a minute or a minute before Mr. Parrick and the Mexican's son got there.

The Court: Doctor, I think you should attempt to amend that sentence, the word Mexican doesn't look good in the record. I assume you are giving your best estimate; is that [412] correct?

The Witness: That's correct.

Q. (By Mr. Kriesien): And when you turned Mr. Lyons over, was there any evidence of pulmonary edema at that time?

A. No, that came shortly after that.

Q. How shortly after?

A. Oh, I presume another four or five seconds, maybe.

Q. Four or five seconds? A. Yes.

Q. What was it again, I forgot to put that down, the length of time from the time you arrived and turned Mr. Lyons over there and the other parties arrived? A. I don't know that I stated.

Q. Your best estimation?

A. I don't believe I was asked that, I said it was approximately—I thought around ten seconds when the Mexican arrived and between another half minute to a minute before the—or it might have



(Testimony of Dr. Homer P. Rush.)

been even shorter than that—20 seconds to 40 seconds before Mr. Parrick and the Mexican's son arrived, and I turned him over probably within a matter of five seconds after that.

Q. And then a short period of time after that the pulmonary edema developed?

A. That's right.

Q. Doctor, do you recall the circumstances of the taking [413] of your deposition on January 7, 1955, at which time Mr. Maguire, Mr. Beebe, Mr. Mize and myself and Dr. Wilson were present in your office? A. I do.

Q. Do you recall being asked the following questions by Mr. Beebe and giving the following answers to those two questions and answers? "When you arrived there you found that he was pulseless? Answer: Right. Question: That there was proof of pulmonary edema. To me that is sort of a medical conclusion. What was the evidence of it? Answer: I mean by that in his breathing you could hear moisture and a wheezing in his chest somewhat like an asthmatic might have, and with it a whitish frothy sputum was coming from his mouth that had blood tinges in it. Question: That indicated to you pulmonary edema? Answer: That is right." Do you recall those questions?

A. I do, and that is all correct except the time element. I don't know that I was asked as to the time element about when I rolled him over or how quick he began to show it, and I think when you have an accident of that type, when you run up to

(Testimony of Dr. Homer P. Rush.)

see what somebody is doing, that you're not going to specifically argue about whether it's five seconds before you began to see the fluid coming from his mouth or whether he was having evidence of it, and if you want to be technical, probably beginning the pulmonary edema or he couldn't have had all the moisture in his chest, but the true pulmonary [414] edema that I think of clinically, and you are going to get the frothy sputum and that came after I rolled him over and I estimated that might have been five seconds. It was a very short time, as I stated.

Q. Doctor, hereafter when I ask you questions, will you answer it? Then if you want to make an explanation of it, tell us and you can make that explanation of your reasons why you give it. Please do not continue making an explanation without designating them as such.

Now then, after your arrival and finding Mr. Lyons, how long a period was it before Mr. Lyons expired?

A. I do not remember, just a few moments.

Q. A few moments, do you mean by that two minutes, three minutes?

A. I don't—

Q. What is the time element involved wherein an emotional factor or reflex or whatever you are going to call it results in medical shock until one loses consciousness?

A. It depends entirely upon how severe the shock is. There is all degrees of shock.

Q. Well, let's pin it down to do you have an

(Testimony of Dr. Homer P. Rush.)

opinion as to the time element that would have been involved in this instance from an emotional reaction and infliction of superficial injuries until the time Mr. Lyons became unconscious?

A. Yes, I have an estimation as to what that was, and again [415] it is an estimate, I don't know that we can say that it was the shock in this case that caused the unconsciousness, if that's what you meant by your question. I don't know whether I got you quite clear.

Q. Well, is there any question about the fact that medical shock causes unconsciousness?

A. Yes, you can have medical shock—in fact the first symptom in medical shock I believe is weakness and tendency toward vertigo and cold, and unconsciousness lies quite a little ways down, like thready pulse, small veins, pallor.

Q. What caused unconsciousness in Mr. Lyons from a medical fact?

A. It was my feeling that the arrhythmia probably caused the unconsciousness.

Q. And how long would that—that arrhythmia, was that produced by a medical shock?

A. No, I believe it was produced by the same thing that produced the medical shock.

Q. Oh, then, it was instantaneous?

A. The two would come together, I would think.

Q. Now, is angina pectoris any factor in the chain of events of medical shock?

A. Not necessarily.

Q. Can it be?           A. It can be. [416]

(Testimony of Dr. Homer P. Rush.)

Q. What was the occasion and the circumstances under which you executed your affidavit as to the cause of Mr. Lyons' death on March 31, 1953?

A. Is that the first one or the second one?

Q. That would be the first one.

A. Because I don't remember the dates they were executed—I was asked to execute an affidavit by Mr. Maguire and he came up to my office, if my memory is right, and I went over the factors I thought were involved and put them down in the shortest concise manner that I knew.

Q. May we have Exhibit Number 7?

(Document handed to counsel.)

Q. I am handing you Plaintiff's Exhibit Number 7. Before proceeding to that, Doctor, I would like to ask you a question as to whether or not at the time of the occurrence or shortly thereafter and prior to the performance of the Mexican autopsy you gave an opinion that the cause of death of Mr. Lyons was the result of heart failure from either a coronary occlusion or infarction or coronary insufficiency?

Mr. Maguire: May I have that question read?

(Question read.)

The Witness: I gave an opinion as to what I thought the cause of death was, that I did think it was a heart death.



(Testimony of Dr. Homer P. Rush.)

Q. (By Mr. Kriesien): You did?

A. I did give that observation to a layman that was standing [417] by me that I thought it was a heart death. I don't know that I explained in any detail what kind of a heart death I thought it was.

Q. I will ask you whether or not you gave an opinion to Mr. Parrick that you did not believe that the death of Mr. Lyons was the result of a gunshot wound, but that you felt it was a heart death from the way he acted clinically?

A. I did, that's correct.

Q. Well, was it your opinion, at that time that you would have expected to find a coronary occlusion and miocardial infarction or a coronary insufficiency?

A. It was my opinion at that time, that I would have expected to have found a coronary occlusion, a coronary thrombosis and a beginning to develop miocardial infarction.

Q. You said nothing about the possibility of a coronary insufficiency?

A. I don't believe that I mentioned anything to Mr. Parrick about either one of them.

Q. Did you feel at that time that the death had been the result of coronary insufficiency?

A. No, I felt at that time that it was an arrhythmia, and that the arrhythmia was most apt to be caused by a miocardial occlusion or a miocardial infarction, and if it wasn't that, then there would have to be some other factor to produce the



(Testimony of Dr. Homer P. Rush.)

arrhythmia. That factor, at that time I felt would have to [418] be shock. I didn't believe I went into even thinking it out in my own mind at that time as to what I felt might have caused the shock or the details of the shock or how much it was. I was really a little excited on what was going on.

Q. Did you have an opinion at that time that he had a ventricular fibrillation secondary to a marked coronary insufficiency?

A. I thought that was a possibility.

Q. All right, now, Doctor, referring to the affidavit contained in plaintiff's proof of death, you made the statement, "From my own observations made at the time of his death, which are corroborated by the autopsy report, I certify that James A. Lyons had an underlying coronary artery disease and that when the shotgun was discharged, the explosion and concussion produced a shock which precipitated an acute angina, causing some coronary occlusion and a sudden ventricular fibrillation of the heart which caused his death within five to ten minutes after the accidental discharge of a gun in close proximity to his face." That was your best opinion at that time?

A. That is correct.

Q. At that time, you were of the opinion, were you not, Doctor, that Mr. Lyons had an underlying coronary artery disease? [419]

A. That is correct.

Q. And there was an acute angina involved?

A. I assumed, as I mentioned in my deposition, the term angina was a poor term to use. I have used

(Testimony of Dr. Homer P. Rush.)

several poor terms in there. If you wanted to be medically accurate, I was using the term of a layman as more or less of a synonym for coronary involvement. Angina, of course, as a symptom, means pain which comes from a relative coronary insufficiency.

Q. From coronary insufficiency and that was the term you used?

A. Or artery insufficiency.

Q. All right. What do you mean causing some coronary occlusion?

A. I thought there was a sudden coronary occlusion and had made a complete inefficiency.

Q. And you certify that that was observed or found by your own observations made at the time of his death and corroborated by the autopsy report?

A. Remember at that time, the autopsy report that I had said aortic insufficiency and coronary insufficiency and I had no details.

Q. The autopsy report you had had no reference to some coronary occlusion; did it, Doctor?

A. No; it didn't have an organic occlusion, as I stated this morning, if this man had had adequate amount of shock so that [420] there was no blood going to the coronary, physiologically, there would be an occlusion. The man probably had no angina, either because he was unconscious and wouldn't experience angina, and that is pain, it is a symptom, but I was trying to paint a word picture of what I thought would be found, I was not expecting to be quizzed as to the meaning of the words.

(Testimony of Dr. Homer P. Rush.)

Q. You are not being quizzed as to the definition of words, we are trying to find out what the cause of death was in your opinion at that time.

A. I told you.

Q. Now, your opinion at this time is different from that?           A. It is.

Q. All right. Now, when did you change that opinion?

A. When I began to get an adequate amount of information as to what the autopsy showed, not what the conclusions were.

Q. And after you obtained the information as to what the autopsy report showed, then your opinion was different; is that correct?

A. I began to wonder about my opinion and began to check up then on records to see what the clinical records would show; I felt—what I felt was the real cause of death at the start and apparently was not.

Q. You had the autopsy report prior to giving your deposition on January 7, 1953—1955, Doctor, had you not? [421]

A. That is correct, I had the report, I think, within 24 hours before, and I did not attempt to analyze what the translation of the Mexican words might mean. I accepted what they drew as a conclusion the aortic insufficiency, it was there until I found out that there was nothing described in what we saw to verify such a conclusion, so I had to then change my opinion as to having an aortic insuffi-

(Testimony of Dr. Homer P. Rush.)

ciency, then I checked back and reported and found no increased pulse pressure, no evidence of a pounding pulse found by anybody, and no murmurs heard by anybody, then I naturally didn't see it as an aortic insufficiency.

Q. But the fact remains, does it not, Doctor, that you had the information of the findings of the autopsy report prior to giving your deposition on January 7, 1955?

A. I had seen the autopsy report and had information that I thought was correct, but which since then I don't believe was correct at that time.

Q. And at that time you had Dr. McBride's medical case history file, did you not?

A. I had had the language before that, but I had not studied it sufficiently, I told you several times since then.

Q. So that then, what were the facts and circumstances under which you executed a supplemental affidavit on the 10th day of July, 1953?

A. I was informed that this was for trial and more detail [422] should be put in.

Q. Who advised you as to that?

A. I believe it was Mr. Maguire, but I am not certain. It might have been Mr. Beebe.

Q. At that time you had no further information than you had at the time of the preparation of your affidavit of March, 1953?

A. No; I don't believe I did. I don't remember the date of the second affidavit, Mr. Kriesien.

Q. But it follows your first affidavit——

(Testimony of Dr. Homer P. Rush.)

Mr. Maguire: The second affidavit was of July 10, 1953.

Mr. Kriesien: 1953, that is correct.

The Witness: I—the date is probably here—but I don't see it—at the first of it—yes, here it is.

Q. (By Mr. Kriesien): Now, I notice, Doctor, in that affidavit that you do not give a condition of an underlying coronary artery disease.

A. I don't—just where are you, would you point it out?

Q. Well, the point I am making, Dr. Rush, is in your affidavit of July, 1953, did you incorporate the same medical conclusions as to the cause of death? Put it that way?

A. Now, what is your question?

Q. Will you read the question, Mr. Reporter?

(Question read.)

A. Well, I would think that they would be the same. I used [423] the term angina instead of the term coronary disease as I stated, because it was more of a lay term.

Q. Did you incorporate some coronary occlusion?

A. No; I didn't make use of the words "some coronary occlusion."

Q. Yet, at that time——

A. In fact, if you are going to use the term coronary occlusion, I say the word some added in front of it will make some evidence that it either was an occlusion or was not, and some coronary



(Testimony of Dr. Homer P. Rush.)

occlusion would indicate that there must be some involvement as regards coronary insufficiency, that I was trying to point out, and in the second affidavit I used the term angina instead. Angina, as I have frequently stated, is the symptom from coronary insufficiency.

Q. Now, Doctor, prior to your taking—giving your deposition, January 7, 1955, did you go over the translation of the findings of the autopsy with Mr. Maguire or with Mr. Beebe?

A. I went over sections of it; yes.

Q. Did you go over the section which referred to the physical condition or the pathological condition of this man?

A. I went over portions of the section referring to the pathologic condition, I didn't go over the whole pathology at that time.

Q. Why didn't you, Doctor? [424]

A. I had a lot of people to take care of.

Q. So then, what portion of the autopsy were you familiar with at the time you gave your deposition?

A. The conclusions primarily, and the fact that the sigmoid valves or the semilunar valves, so that I knew what part they were talking about and that they had stated there was no involvement of the coronaries and including the coronary insufficiency and artery insufficiency and I assumed those to be correct.

Q. Did you assume as correct the findings of a

(Testimony of Dr. Homer P. Rush.)

diminishment of the caliber of the coronary arteries?

A. I would think that that would be correct, yes, sir; that is an observation.

Q. And did you observe the fact that the liver was enlarged?

A. I don't recall whether I observed that at that time or not, Mr. Kriesien.

Q. Now, is it your testimony, Doctor, that an emotional upset and the infliction by the superficial injuries to the face will solely and independently of all other causes result in death?

A. No; I didn't state that.

Q. Pardon me?

A. I don't believe I ever stated it that way.

Q. I am asking you if you so state—will you read the question?

A. No; I didn't so state. [425]

(Question read.)

A. And I answered I didn't so state, nor would I so state now.

Q. Well, what is the net effect of your statement that there was an explosion, the reflexes and go through to the terminal point of death, isn't that the same question, practically?

A. No; I wouldn't think it was because many people can have a superficial wound and can have an explosion and would not have an arrhythmia that would follow it, wouldn't have shock, wouldn't have

(Testimony of Dr. Homer P. Rush.)

congestive failure. Those other things had to follow those initiating chain of events whatever initiated the chain of events. In fact, if you are going to use one thing on this as the most likely way to express it, but I—what I thought it would be, the arhythmia produced the death. I merely thought the other things caused the arhythmia.

Q. Well, Doctor, is an emotional upset, together with the infliction of superficial injuries such as sustained by Mr. Lyons, a commonly accepted cause of producing this arhythmia and result in death?

A. It's one of the accepted causes; yes, sir.

Q. My question is whether it is a commonly accepted cause?

A. I think you could call it a commonly accepted cause.

Q. Isn't it a very rare thing, Doctor? [426]

A. I think it's fair to say that outside of when there is coronary occlusion with miocardial infarction which will frequently cause arhythmias which will cause death, that probably shock as a result of emotional tension would be just as common as some of the others. It has been known for 25 centuries that shock could produce death and was presumed originally to be a ventricular fibrillation that caused the death.

Q. Would you say, Doctor, that the emotional upset such as shock from the explosion and concussion of the shotgun together with superficial injuries such as sustained by Mr. Lyons, independently of an

(Testimony of Dr. Homer P. Rush.)

underlying disease, could produce coronary insufficiency and result in death?

A. Did I say that it could; is that your question?

Q. No.

The Court: If you would speak just a little louder.

Mr. Beebe: If your Honor please, there have been a number of things I haven't wanted to make any objection to, but at this point I wish to object upon the ground that counsel obviously is paraphrasing from a deposition. He is not giving the witness a chance to hear what the questions were or what the foundations were and I don't think it is fair to a witness to just do that, as I understand it, he ought to be given a chance to know what his answers are and have a copy of the deposition to see what the answers [427] were and what the grounds were for the questions asked him before.

The Court: That is the procedure I follow in my own court, that the witness be shown his deposition, but I didn't want to interfere with any custom you have here.

Mr. Beebe: I believe that is the rule here, your Honor, and I hadn't wanted to insist on it, but at this point, the last one I think was read rapidly and rather unfairly, and the witness obviously didn't get it. I think that if counsel is going to question from that he should mark here the page that he is on and give the witness an opportunity to see what the question was and what the assumptions were,

(Testimony of Dr. Homer P. Rush.)

and in the matter of this, I have to go back myself and find what it is, and it doesn't seem fair.

The Court: I think that is the proper procedure.

Mr. Kriesien: I will not use the deposition without designating the questions. I don't know as to the propriety of giving the witness a deposition to read, I have never heard of that before.

Mr. Beebe: He should be given an opportunity to have one.

The Court: Well, it is uniform practice where I come from to show the witness the deposition; I don't want to intrude on any local rules you have here.

Q. (By Mr. Kriesien): Well, Doctor, to get myself back on [428] the track here, do I understand it to be your testimony that this emotional upset, infliction of superficial pain such as sustained by Mr. Lyons is a commonly accepted cause of a precipitation of a ventricular fibrillation or coronary insufficiency and death?

Mr. Beebe: I think, counsel, it was superficial injuries and not pain, did you mean that?

Mr. Kriesien: Superficial injuries.

The Witness: I don't know how common you could say it is, it is something that can produce it.

Q. (By Mr. Kriesien): Also, Dr. Rush, isn't it possible for an individual to have a fatal heart attack?      A. Surely.

Q. Without any prior symptoms?

A. Surely.

Q. And is it possible that, or probable that Mr.



(Testimony of Dr. Homer P. Rush.)

Lyons could have suffered an attack of angina pectoris prior to any discharge of this shotgun?

A. It's possible, certainly.

Q. Doctor, going to the Mexican autopsy report, what is the—what significance, if any, is the finding of a left ventricle slightly hypertrophied?

A. In a man of that age, I don't think that it is of too much significance; I think that it is of some significance.

Q. You say some significance, what [429] significance?

A. That it would be indicative that that heart had probably had a little extra work to do at some time within the past few years previous to his death, anyway possibly the past few months.

The Court: Isn't it a fact, Doctor, that this hypertrophy is found in men much younger than Mr. Lyons?

The Witness: Yes; it is true, if I may——

The Court: They go along without any apparent discomfort and live frequently to a ripe old age?

The Witness: That is correct, and this must have been a very slight hypertrophy, because the electrocardiogram doesn't show any significant evidence of it.

Q. (By Mr. Kriesien): You can have a slight hypertrophy though that does not reveal itself in an electrocardiogram?

A. Yes; I think that that would be possible.

Q. And isn't it a fact that that is also evidence of some degree of aortic insufficiency?

(Testimony of Dr. Homer P. Rush.)

A. Well, aortic insufficiency usually has a marked hypertrophy.

Q. But if there is a mild degree of aortic insufficiency?

A. Well, I don't know how in the world you can have any clinical aortic insufficiency and have a slight hypertrophy. Everyone I have ever seen has been a definite hypertrophy and is shown by electrocardiograms and X-rays and on physical findings, so from my own experience, I would have to say I'd [430] expect much more hypertrophy than a slight amount which would not show on an electrocardiogram, and it is specified by the autopsy surgeon to be slight.

Q. Doctor, I will ask you whether the following question was asked by Mr. Beebe and the following answer given during your deposition proceedings on January 7, 1955, page 93: "Was the evidence of slight hypertrophy of the left ventricle of significance to you? Answer: No; only inasmuch as it would indicate that he probably has had some coronary sclerosis for a period of several months or more, but he was not supposed to have high blood pressure as I understand it, and you have got to have some reason to make the left ventricle larger, and hypertrophy means enlargement, and the other common cause would be some mild degree of coronary insufficiency. If it was a very serious affair—you very frequently do not get hypertrophy; you get this dilatation, so with a mild degree you read here, just you put that as more proof that we had cor-

(Testimony of Dr. Homer P. Rush.)

onary insufficiency. That could also go with this aortic valve lesion, which also cause hypertrophy of the left ventricle''?

A. That's correct, the only way I would change that at the present time is degree, and I assumed then that the hypertrophy was probably more marked than was mentioned, because I expected aortic insufficiency and I presumed it was there. You can get left ventricular hypertrophy from pulmonary [431] atherosclerosis.

Q. Why did you assume it was there at the time you gave the deposition?

A. Why did I assume what?

Q. That this condition existed at the time you gave your deposition?

A. The death certificate that I saw read coronary insufficiency, and I assumed that they must have found some physical evidence to support it or they wouldn't have drawn such a conclusion.

Q. Doctor, you stated that you went over this autopsy, I admit you said not entirely, but this question was read to you from the autopsy report findings.

A. I may have, I don't recall whether it was from the autopsy report or whether it was from this death certificate I saw. Those are the only two documents I had seen, and it would have to be from one of them.

Q. Doctor, in reference to the passive congestion of the liver, is coronary insufficiency the cause of producing that condition?

(Testimony of Dr. Homer P. Rush.)

A. Not in itself, no; indirectly, yes; it can. It's not a common finding.

Q. Now, Doctor, today do you place any significance on the fact that the aortic valve, semilunar valve was thickened and hardened with atheromatic deposits? [432]

A. Oh, yes; you would put some weight on it certainly, but it would not be indicative of a functional disturbance in the way that valve could act.

Q. Could it contribute to creating a coronary insufficiency?

A. I wouldn't think that it, per se, could; no. If you have a true aortic stenosis or aortic insufficiency, yes; it would, but I don't believe because the valve is stiffened that there is any inefficiency in the way the valve works as regards closure, that it would be a factor.

The Court: May I suggest we take a short recess, gentlemen?

Mr. Kriesien: Thank you.

Mr. Beebe: Thank you.

(Whereupon, a short recess was had.)

The Court: Proceed, gentlemen.

Q. (By Mr. Kriesien): Dr. Rush, I will ask you whether the existence of the conditions found in Mr. Lyons' heart are found in a normal heart?

A. I think you should tell me what you mean by normal, because I believe it's fair to say that you will find atherosclerotic plaques in the aorta in the

(Testimony of Dr. Homer P. Rush.)

coronaries of many average parties and individuals of that age group which you would consider as normal from an insurance standpoint if they are to be examined for an insurance policy, as not [433] perfect.

Q. Could you describe some change in the heart from aortic insufficiency and coronary insufficiency?

A. I don't believe it did have, that's what made me change my opinion, when I state that I don't believe there was organic involvement to support it.

Q. Could you yourself, setting across the table from Mr. Lyons, watching him fish, watching him walk, diagnose whether he had aortic insufficiency or coronary insufficiency?

A. I don't believe that I could diagnose that he had an aortic insufficiency, unless he had an acute pain and so forth, an angina—or whether he had, an observation I told you about the aortic insufficiency of any moment, I believe could definitely be told from sitting across the table from a man that had no collar around his neck.

Q. Is there any other type of aortic insufficiency that would be discernible by you?

A. I suppose that at the very start, when it might be beginning to break through, there might be such insufficiency, but I don't believe clinically that it would be of any particular importance at that time, I believe by the time it got to be clinically important, that you would be able to see the increased pulsation of the carotid.

Q. If the man died of coronary insufficiency,



(Testimony of Dr. Homer P. Rush.)

would the diminished caliber of the coronary arteries be a contributing factor to death? [434]

A. I—if a man died of aortic——

Q. No; coronary insufficiency?

A. Coronary insufficiency providing the diminished caliber was sufficient, it would be of importance; if it wasn't, I do not believe it would be.

Q. You cannot tell yourself, and have no knowledge of your own as to the extent Mr. Lyons' coronary arteries were diminished?

A. No; the only thing I had to go on was the description that was painted in the autopsy.

Q. Are there many factors that can produce an acute angina pectoris, Doctor?

A. Well, of course, I think angina pectoris would be considered an acute affair anyway. It's a sudden pain that comes on. It comes on acute and the common thing to produce it is lack of adequate amount of oxygen to the heart muscle or coronary insufficiency. Now, you can get chest pain from many, many other causes but whether you want to call it angina or not would be a different question.

Q. Now, can a—pardon me, Doctor, referring to Plaintiff's Exhibit Number 42, where you have indicated the point that the one centimeter gallstone was lodged or found, would the passage of a stone of that diameter down the cystic duct cause pain and a disturbance in coronary blood flow?

A. It's hard for me to visualize how it could pass down [435] the cystic duct, but if it did pass down the cystic duct, it certainly would produce—now,

(Testimony of Dr. Homer P. Rush.)

well, it would cause a disturbance in the coronary blood flow, but that would be very debatable; it could, but it wouldn't necessarily have to.

Q. Now, what is the degree of pain in a gallstone passing down the cystic duct; do you have any way of describing it? A. It is a very severe pain.

Q. As a matter of fact, that is one of the more severe bodily pains; is it not?

A. That is right.

Q. And can cause, you may—you may resume the stand—that can cause a reflex, can it not, like any other reflex such as emotion, fear, pain?

A. Yes, sir.

Q. Anger? A. Yes; it can.

Q. And an individual can have that condition develop, can he not, for the first time where he is stricken with very severe pain that will go into a reflex and into ventricular fibrillation?

A. I think it would be very fair to say that he has got to have it the first time that the stone is going to get down to the duct, and I think it is very fair to say it could reflexly start a ventricular fibrillation. [436]

Q. And death?

A. Followed by death. But I don't believe a one-centimeter stone could go down a cystic duct.

Q. But, Doctor, the medical—autopsy report has designated the location of that stone, and you are basing your opinion now, not upon any autopsy findings but upon your—just your own opinion?

A. No; I think the stone was there, it is what

(Testimony of Dr. Homer P. Rush.)

was stated, and I have got to accept that the stone is where I made it, but that doesn't mean that the stone was formed in the gallbladder, it could have been formed as a small stone and gone to the cystic duct and had deposits around it, and it could have been forming for five years, it could have been passed out as a stone one millimeter in size and lodged in one of these folds out here in this area (indicating).

Mr. Maguire: Referring to what?

The Witness: Referring to position A where the one centimeter stone was found.

Mr. Maguire: On Exhibit Number what?

The Witness: On Exhibit Number 42. The formation of gallstones is, because there is some type of a crystal that gets started and then from the material around it, there are more of these crystals deposited and it gradually gets bigger, and bigger, and bigger. Now, in the gallbladder where it is more concentrated, it is going to form stones a good [437] deal faster, but there are people that form gallstones over the bladder, and they have been removed before they can get to the biliary tract.

Q. (By Mr. Kriesien): Can they form in any other place and be located at that particular point?

A. Yes; they could form right as I mentioned, I don't know why a one-millimeter stone couldn't pass from the gallbladder and get caught in one of the folds in position A on Exhibit 42, and then after a period of five years gradually have more salts

(Testimony of Dr. Homer P. Rush.)

added to it, and get bigger and bigger and become one centimeter.

Q. That's true, but when the condition occurs, there is a dilation or enlargement of the cystic duct; is there not?

A. Not if it wasn't—it was free—that would produce a dilation if there were a ball and valve affair or if there were a blockage in it, if there is a complete blockage out there permanently, you wouldn't get a dilation, or if it were a ball and valve affair where it would go past the ball and then you could get dilation, but it was stated in the autopsy that this was free, so we have nothing to assume that this was a ball-valve action on it.

Q. Well, this one-centimeter-diameter gallstone going through the cystic duct which is three centimeters in diameter; is that correct, Doctor?

A. I think that that is getting pretty big. [438]

Q. Now, you are talking about the cystic duct?

A. The cystic duct?

Q. What is the diameter of the cystic duct?

A. Well, it varies with people, the same as any anatomical thing, but probably more like third to half of a centimeter would probably be more nearly the average.

Q. Then you would expect, would you not, the passage of a one-centimeter gallstone down a cystic duct that was one third to one half a centimeter to produce some degree of pain, excruciating pain?

A. I wouldn't expect it could pass down.



(Testimony of Dr. Homer P. Rush.)

Q. Would there be any symptoms during its formation, such as colic, indigestion?

A. Not necessarily, colic would occur if you had a stone any place in the biliary system that would produce smooth muscle contraction of the duct, that could be the cystic, or common hepatic duct, common duct, or any of them as regards colic. Indigestion, of course, depends entirely upon gallbladder functions, not necessarily the formation of the stone. Many people with stones have no digestive disturbances.

Q. When they are located in that particular point, the point designated on Plaintiff's Exhibit 42 as position A?

A. No; I don't see why they have to have any more there, providing it was free and there was movement of bile around [439] it, and there apparently must have been because this man never gave symptoms suggesting this.

Q. Again, there also has to be that first attack?

A. Right.

Q. Would there be evidence of reaction in the cystic duct itself?

A. I would think it would be, if you had a stone that just passed through that size, I would expect it to have a good deal of tearing in the mucous membrane.

Q. I can't hear you, Doctor.

A. If it were possible for that stone to go through, which I don't think it would be, it certainly would have to tear the lining and so forth in the cystic duct in order to get through, and I would



(Testimony of Dr. Homer P. Rush.)

think it would be excruciating pain, and I would think that the pathologist should have been able to have shown changes in it.

Q. Now, prior to your testimony here in Court, Doctor, it was your opinion at the time of the taking of the deposition that the emotional upset and superficial injuries would not have resulted in Mr. Lyons' death if an aortic and coronary insufficiency had not contributed to the death; is that correct?

A. I don't believe I made such a statement. I believe I made the statement that having coronary insufficiency and aortic insufficiency, these various factors that you mentioned [440] would be more apt to cause the chain of events than it would if those conditions did not exist. I don't believe I made the statement that they had to be there.

Q. Well, Doctor, referring to page 56 of the deposition proceedings of January 7, 1955, I will ask you if the following questions were asked and the following answers given: "I believe that you testified before that an explosion such as the discharge of a shotgun would not, except in very rare cases, cause death in an individual with a normal heart? Answer: That is right. Question: I will ask you whether or not in your opinion the condition of Mr. Lyons' heart as revealed by the medical case history file and the Mexican autopsy report was a contributing factor medically speaking of the death of Mr. Lyons? Answer: I believe it is correct to state that if this man had not been in the condition he was, he would not have had this reaction from

(Testimony of Dr. Homer P. Rush.)

the shotgun going off next to his ear, meaning by that, that he had the condition of a coronary insufficiency, an aortic insufficiency; which is also exceedingly important, I believe, in this particular case, to allow the reflex reaction from emotional tension to have been much more probably that it would have been in a normal individual by a great per cent. Does that answer the question?"

A. I think that statement is still correct. I don't believe I make a statement in there any place that he had to have [441] any—either one of those conditions. I assumed that he had them because it was reported that he had them. Now I don't believe that he had aortic insufficiency, I feel definitely he couldn't have had in the objective findings and as regards the coronary insufficiency, he could have had plenty of relative coronary insufficiency from his blood pressure and shock because of the blood going to his heart which would give you coronary insufficiency for the moment.

Q. Now, you say due to the objective findings, what objective findings are you talking about?

A. The autopsy findings where they described the valve.

Q. Well, you had that information at the time you gave that deposition, did you not?

A. I did, and I told you that I had not looked it over and had not digested it except in some meager parts.

Q. Doctor, I am going to ask you if the following questions were asked and the following answers

(Testimony of Dr. Homer P. Rush.)

given in your deposition of January 7, 1955, at page 33: "You have examined the Mexican autopsy report? Answer: I have. Question: And are familiar with the findings with reference to the heart condition? Answer: Yes; I am familiar with the translation."

A. That is correct, and that included the conclusion which said aortic insufficiency and the translation I assumed.

Q. Doctor, I assume you are assuming a lot, but you have testified here that you don't recall. You say you just [442] hurriedly glanced at this autopsy report and you weren't too familiar with it, and that is the basis for giving the opinion that you did for that time. Now, you did answer that question specifically, that you were familiar with it?

A. Yes; I answered that I had gone over the report and was familiar with the conclusions that were in it.

Q. Well, Doctor——

A. I don't know that I stated conclusions, I felt that I knew what the pathology of the heart showed at that time, and found out that it wasn't what I thought it was.

Q. Doctor, you were under oath, were you not, when you said that you had examined the autopsy report? A. That's correct.

A. That's correct.

Q. And you were examined in detail by Mr. Beebe with reference to all of the findings of the autopsy report; is that correct?

(Testimony of Dr. Homer P. Rush.)

A. I don't believe that I was examined in detail about all the findings, I don't think it was mentioned about the sigmoid valves and about the coronary insufficiency and about the liver being enlarged and about the passive congestion of the lungs and so forth, and I felt that I had a reasonable understanding of it until I found out that what I thought was meant by hardened valves and so forth, isn't what was meant.

Q. Well, now, how did you find out what was meant by the hardened valves? [443]

A. By having it retranslated.

Q. Well, I believe—may I have the new translation? Are you speaking of the one the doctor just gave in court the other day? A. Yes.

Q. That's the first time you had knowledge of it?

A. Pardon me?

Q. That's the first time you had knowledge of this change of condition; is that right?

A. And that's the first time that I heard the whole thing given.

Q. You mean you have never examined the whole Mexican autopsy report?

A. Oh, yes, but I hadn't at the time of this deposition. I had gone over it, and I had questions that came up, and I had wondered about it, and if we wouldn't get some additional information, and as we got additional information I began to wonder more about it, and wondered where we could get a better translation, I even called up the American



(Testimony of Dr. Homer P. Rush.)

Association, Medical Association in Chicago to find out where we might get a clearer translation.

Q. Did you do that before or after your deposition? A. I did that after the deposition.

Q. Now, what are the material variances between the translation that was produced here in court the other day and the [444] translation that was submitted with the proof of death, which is Plaintiff's Exhibit 9?

A. Well, the differences to me, seem to be this, Mr. Kriesien, that I interpreted——

Q. Just a moment, I want you to tell me what the material variances are between the two translations that caused you to change your entire opinion in this case. Now, I will ask that the—Plaintiff's Exhibit—I believe it's 9, the proof of death——

A. I don't think that I have changed my entire——

Q. Number 7 and the new Mexican translation being—do you have that one that Dr. Christen introduced? May I approach, your Honor?

The Court: Yes.

Q. (By Mr. Kriesien): I am handing the witness Plaintiff's Exhibits 7 and 9.

(Document handed to witness.)

The Witness: I could answer and tell you the reasons for this, but if you want me to look up specifically and find the page and so forth, why, I will have to look through it.

Mr. Kriesien: I can point it out, and perhaps save time. May I approach the witness, your Honor?



(Testimony of Dr. Homer P. Rush.)

The Court: Yes.

The Witness: There is one other factor that comes in it, but where is it? This was—the following are some of the [445] things that made me feel that there was a difference in it and made me go back and reevaluate what these various words mean. First had to do with the description of the artery in the brain in the translation, that is on page 7 in Exhibit 7, it says, “Slightly soft brains. Vertebral, basilar and cerebrum arteries and hexagon of Willis, no alteration. The neck vascular nerves were dissected, having found no alterations.” Then, to go down further, “The heart encreased pericardium with strong adhesions,” and the way it is spelled is E-n-c-r-e-a-s-e-d (spelling); I interpreted that as increased on the diaphragm, and the next is “Fattened and hardened aortic sigmoids with atheromatous pockets.” I thought pockets probably meant there was deformity of the valve, and it was a deformity of the pocket of atheromatous plaques. “The coronary arteries dissected having found atheromatous plates.” Well, if it was true that you had that much on the valve, I wondered how much more there would be in the coronary artery. Now, when reading this one, it was done the other day, it appeared that the translation varied, it said the artery, the cerebral artery and the circle of Willis were found to have no alterations. It doesn’t say anything about a softened brain. “The neurovascular bundles were dissected and no alterations were found.” Then down further,

(Testimony of Dr. Homer P. Rush.)

mentioned that, you might recall that it was like that.

Mr. Kriesien: But the question I am now asking you, Mr. Beebe, is the question that you asked of Dr. Rush, was that from Mr. Wilson's translation or from the original translation that was submitted with the proof of death?

Mr. Beebe: The Wilson translation that we have now is still a later one. My recollection is that the first rough draft of the Wilson translation itself, but it occurs to me that either we had them or we were advised you probably had the Mexican translation that you have there.

Mr. Kriesien: Well, my translation was there, Mr. Beebe, when you propounded your questions to Dr. Rush.

Mr. Beebe: Let me look, I can't be sure of that matter unless I have the exhibit that is attached to the proof of loss, and I think I can soon tell you. Yes, at page 7 of it, for example my translation didn't say a thick layer of fat tissues and then I went on, I believe one translation said gross tissue, so that is why I believe we have the first translation that Wilson made and that I used it. Now, if I can find that point in this——

The Witness: Page 7.

Mr. Beebe: Yes, 7——

The Witness: It was page 7, the one I had.

Mr. Beebe: Yes. Now, my question was from a translation that [449] said the heart was surrounded by a thick layer of fat tissue, and then I said I believe one translation said gross tissue, but this

(Testimony of Dr. Homer P. Rush.)

one says a thick coat of greasy tissue, and I think that gross tissue was a stenographic error of the court reporter. Now, I will look further, on page 88 of the deposition, Mr. Kriesien, the question was, "What would the term 'atheromatous deposits' mean"? The wording attached to—contained in the translation of Mrs. Del Paso which is attached to the proof of loss, and it says atheromatic plaques and it is spelled A-t-e-r-o-m-a-t-i-c P-o-c-k-i-t-s (spelling). So from that, I would assume that we have the first translation that Mr. Wilson made, actually he made a number of those.

Mr. Kriesien: The specific point that I was attempting to make, Doctor, at the time of the deposition proceedings you were in possession when the question was propounded to you with reference to those atheromatous deposits and not this other term that you used that you thought might mean a defect of the valve itself?

A. I had gone over the autopsy report and I knew that it stated that these plaques and so forth, and I had the impression that they were deformed valves at that time.

Q. (By Mr. Kriesien): That is not the answer to my question.

A. If you will repeat it a little bit louder?

Q. All right, I will be a little bit louder. The question I put to you and I will read it to you from page 88 of the [450] witness' deposition of January 7, 1955, the question was: "What would the term

(Testimony of Dr. Homer P. Rush.)

atheromatous deposits mean?" Your answer: "That refers to the plaques that are present in the lining of the blood vessels that are associated with also hardening of the artery"? A. That's right.

Q. Now, that terminology of the atheromatous deposits was not contained in the original translation that you were just comparing to this question of deformity of the valve, and we have in effect what the translation of Dr. Christen was at the time you gave your deposition on January 7, 1955?

A. Well, I didn't have Dr. Christen's at that time when I gave my deposition.

Q. That isn't my question.

A. I thought that you asked me——

Q. My question is that you had substantially in the same form before you on January 7, 1955, with reference to the translation of the Mexican autopsy as you have today?

A. Well then, I didn't interpret it that way——

Q. Well, answer my question, I'd like to have an answer to my question, Doctor.

A. I don't recall what autopsy reports I had, I didn't know there were so many of them to be considered.

Q. These other discrepancies that you have mentioned between the two reports relating to matters that you have considered [451] immaterial to those proceedings, is that correct? A. I did.

Q. That's been your testimony that these various conditions that have been found were immaterial with the exceptions?



(Testimony of Dr. Homer P. Rush.)

A. That's right, I said I did.

Q. So that then in fact, I will ask you again, Doctor, on January 7, 1955, at the time you gave your deposition, you were in possession of substantially all the medical facts that you are in possession of today?

A. I didn't have the same impression. The facts that I had at that time than I do today—I don't know whether I was in possession of them or whether I wasn't.

Q. Well, what is the difference in the impression of the facts?

A. Valve lesions and aortic insufficiency.

Q. That isn't a fact, Doctor, that is an opinion.

A. I assumed from the description of the valve that it was enough to warrant it in my opinion.

Q. You had a translation of the report, Doctor?

A. I know, but translations of the report to me was not clear. That's why I wondered about it and wanted more information. Otherwise, I'd have accepted it and quit.

Q. Why did you not so state at the time your deposition was taken?

A. I didn't realize it at that time; I didn't have any chance [452] to sit down and study over this autopsy. As you know, you came into my office and I was busy, and I went back in the back room and you kept me there all afternoon.

Q. Doctor, that deposition was taken then approximately two years after this occurrence?

A. That may well be, I don't recall when it was



(Testimony of Dr. Homer P. Rush.)

taken, I don't recall what the autopsy report was, I can recall what I thought at that time, and why I thought it, and after I studied things over, I didn't think the same things now as I did then.

Q. I am trying to find out what the facts are that made you have a change of opinion?

A. I'd had—I will tell you just exactly what they were, because I cannot interpret the valves being hardened, and what is the words used—stiffened, I think as being a valve that is incompetent, and I thought that it probably was and I thought that probably had reference to it.

Q. It said thickened and hardened, well, thickened and hardened, and you could not interpret that?

A. I thought that it probably meant a valve that didn't close, and it was through an insufficiency.

Q. What is the fact that is contained in this new translation that changes that condition?

A. Because here I know that a medical man has gone through and translated this one, and I know that he describes these [453] plaques, he described them in a way I have seen them, and I didn't have to worry any more about a deformed valve, because I knew he wasn't drawing any conclusions and I imagine that he would not draw a conclusion of aortic insufficiency if there were no deformity of the valves.

Q. What is the difference between atheromatic deposits and atheromatic plaques?

(Testimony of Dr. Homer P. Rush.)

A. It depends on where they are.

Q. Now, did the new translation of Dr. Christen change the position of those atheromatic plaques?

A. The impression that I got of the whole thing——

Q. That isn't the question that I am asking you, Doctor.

A. It was after hearing him testify, it was much clearer in my mind than it was previously.

Q. My question is this, Doctor, did the translation of Dr. Christen change the position of the atheromatic deposits?

A. I do not know whether it did or not. I don't recall. I didn't memorize either one of them.

Q. Well then, how can you state that it is the reason that you changed your opinion?

A. Because when I went over the one previously and then I went over this one later, and I got my impression of what was one and what the impression was of the other, and I felt that they were talking possibly about an aortic insufficiency.

Q. Now, again, what are the differences in the medical [454] findings in those two reports that would allow you to change your opinion, the medical findings, the facts, not your impressions?

A. Due to the fact that I was certain that this valve was only a hardened and whatever it stated valve, and that it was not a retracted valve.

Q. Where are the facts and findings, I am asking you to limit your answer to that?

A. That's exactly what made me feel—before

(Testimony of Dr. Homer P. Rush.)

there was a debate in my mind as to what the probability was, that I didn't know enough Spanish, and the individual that translated it didn't know enough medicine to make it clear, so I assumed taking the whole report into consideration, that that is what it referred to in that valve.

Q. Now, Doctor, from this new translation, you don't know the extent of diminishment of the caliber of the coronaries or the aortic valve any more than you knew before?

A. I think I do.

Q. What are the facts?

A. I have answered the question the only way I know.

Q. Apparently I am misunderstanding you, Dr. Rush, because I have not gotten any facts as yet. Now, when did you first notify your attorneys as to your new conclusions?

A. I haven't the slightest idea, Mr. Kriesien, whether it was—in fact, I don't think that it was a conclusion that [455] changed overnight, it was a conclusion that gradually I reached in trying to put all the facts together as they were being brought up, then I continued to put them all together to the interpretation that I had originally put to it that there must have been an aortic insufficiency, I don't think the aortic insufficiency is there. I don't think there is a marked degree of coronary insufficiency, other than functional, but other than that I haven't any conclusions.